





Dan Jones, Aideen Young and Neil Reeder

December 2016



About us

We are the Centre for Ageing Better, an independent charitable foundation. We want a society where everyone enjoys a good later life.

We believe that more people living longer represents a huge opportunity for society. But changes are needed so more people are in good health, are financially secure, are socially connected, and have a purpose in later life.

We bring about change for people in later life today and for future generations. We draw on practical experience, research about what works best, and people's own insights to help make this change. We share this information and support others to act on it. We also try out innovative approaches to improving later lives.

We are funded by an endowment from the Big Lottery Fund. We are part of the network of What Works organisations that promote the better use of evidence.

Acknowledgements

We would like to thank Professor Chris Phillipson and Dr Justin Davis-Smith for their comments and suggestions on earlier drafts. Anna Dixon and Claire Turner provided valuable insight and support throughout the process. All errors of fact or interpretation remain the authors' own.

The Centre for Ageing Better would particularly like to thank Neil Reeder for his contribution to our work, building the foundations of our engagement with this topic and developing our thinking from the outset.

1. Executive summary

Those working with older people or funding volunteering activities can be confident that there are wellbeing benefits for people in later life of making a contribution to the community. There is good evidence that older people who make voluntary contributions report:

- an increase in the quantity and quality of their social connections
- an enhanced sense of purpose and self-esteem
- improved life satisfaction, happiness and wellbeing

Where people in later life feel valued and appreciated in their formal volunteering roles, there is evidence that this contributes to **reduced depression**.

Organisations do not need to spend further time and money demonstrating these outcomes again.

People with higher levels of health, wealth, social connections and wellbeing are more likely to volunteer in the first place, and the evidence suggests that these characteristics are both causes and consequences of contributing. The benefits of making a contribution are real, but they are not transformational.

There is some evidence that the benefits are greater for older people with fewer personal and social resources, lower educational attainment and fair (rather than good or excellent) health. Those who stand to reap more benefit are not the people currently most likely to contribute.

Those running or funding voluntary activities should particularly focus on **engaging older people who are relatively less well connected, less wealthy and less healthy.** They should be prepared to meet the additional costs of supporting these people to participate where necessary.

However, there are gaps in the evidence on the ways in which disadvantaged older people currently contribute to the community, and the motivations and barriers they face in doing so. Organisations should always start with understanding the people they are seeking to support.

They should also focus on activities that are most likely to make a difference – ensuring that older people have meaningful roles with opportunities for social interaction, and are recognised and valued for their contribution.

The evidence does **not** suggest that making a contribution protects against social isolation or frailty in later life. Volunteering may be one pathway (among several) into employment,

depending on whether or not labour market conditions mean there are more jobs open to people in later life. Those running and funding activities to support people in later life should avoid a reliance on volunteering alone to tackle serious issues related to physical health, frailty, social isolation or employability.

2. Introduction

From jury service to street parties, soup kitchens to popping round to make a cup of tea, unpaid voluntary activities make an essential contribution to every community, sustaining the structures and fabric of community life.

There is also a large and growing body of evidence on the benefits that people derive from voluntarily helping others (e.g. Onyx & Warburton, 2003). We want to find ways to enable more people in later life to take up opportunities to contribute their skills, knowledge and experience, because we believe this will help them build and improve their social connections and sense of meaning and purpose.

This review presents a summary of the evidence base on the benefits for people in later life of making unpaid contributions to their communities. We will explore people's motivations, and the barriers and opportunities they face in making a contribution, in a separate review.

The voluntary activities that people undertake to support their communities exist on a continuum from roles that are effectively unpaid jobs to simple acts of kindness (Allen et al., 2015).

As part of an With others in a established In a formal With others more regular or scheme or role as part of more or less As an organised way organisation a public body spontaneously individual **Neighbourliness** Informal / Semi-formal **Formal** Civic e.g. giving a lift, e.g. taking donations e.g. peer support for e.g. volunteering for a e.g. magistrate, going round for a to people in need, long-term conditions, helpline, befriending, councillor, school cup of tea, helping helping with local organising village fete governor, juror, nature conservation, with shopping special constable food response. or street party, helping helping in a classroom clean-ups after riots in Sunday school / crèche or library, charity shop

assistant, trustee

Figure 1 Spectrum of voluntary activities that people undertake to support their communities

Adapted from: Nesta – People Helping People: the future of public services

We use the term 'community contributions' to refer to this whole spectrum of unpaid activity. Although most care and support is provided informally or semi-formally (ScotCen Social Research, 2014) there has been little research on the benefits of informal contributions specifically or indeed, of civic roles or simple neighbourliness. Most of the literature concerns formal volunteering arrangements i.e. giving unpaid help through a formally incorporated organisation such as a charity, public body, business or social enterprise. Hence, unless otherwise stated, the term 'volunteering' in this paper refers to those contributions that are formal in nature.

3. The state of the evidence

This review presents the findings of a scan of the existing evidence on the benefits for people in later life of making a contribution to the community. We have sought to reflect the best available evidence, recognising that there are a number of limitations in the existing evidence base.

The literature focuses primarily on **formal volunteering** – activities that take place within the auspices of a formal scheme or organisation. There are important evidence gaps in respect of the potential benefits of informal volunteering, neighbourliness and 'random acts of kindness'. Even in the area of formal volunteering, there are significant gaps related to new forms of contribution such as micro-volunteering, impact volunteering, digital volunteering, timebanking, peer-to-peer activities or entrepreneurial volunteering.

Much of the quantitative evidence draws on **observational data**, looking at the associations between voluntary activity and health, wellbeing or other characteristics in a population. The experimental evidence is much more limited. Given that choosing to participate is the essence of these activities, it is anyway not clear that randomly assigning people to 'volunteering' activities would be a meaningful way to assess the real-world benefits of making a contribution (e.g. Nazroo & Matthews, 2012).

However, where observational studies find an association, this does not tell us whether one factor is a cause or a consequence of the other. For example, people who volunteer are also more likely to be happy. This could be because volunteering makes you happy, or because being happy leads you to volunteer – or because each influences the other in a virtuous circle. It is also possible that both factors are the result of a third – for example, richer people might be both more likely to volunteer and happier. We did find studies which use multivariate analysis – adjusting observed results to allow for other characteristics such as wealth – to address this 'selection effect', but this technique necessarily involves a degree of estimation.

Where observational data is repeated with the same population over time (through cohort studies), it is possible to compare changes in health or wellbeing between volunteers and non-volunteers – in some datasets, between frequent and infrequent volunteers, those who take up volunteering, those who stop, and non-volunteers. This allows us to look for evidence of 'dose-response' – for example, if volunteering makes you happy, then people who volunteer more frequently should be happier, and people who stop volunteering should be less happy. In general, the best evidence of a causal relationship we have found has been cohort analysis, seeking to account for selection effects and using changes over time to look for dose-response effects.

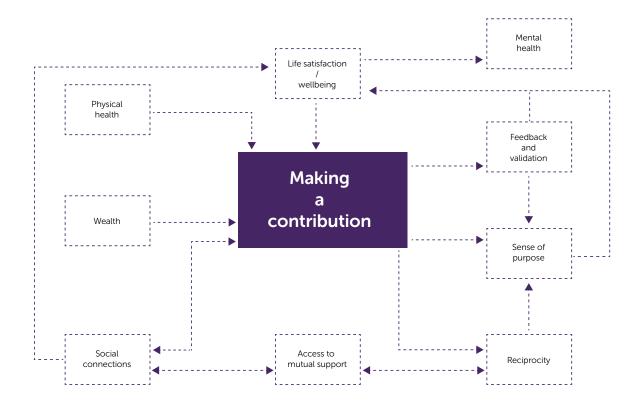
4. The benefits of making a contribution to your community in later life

Our literature search (see Figure 3, page 10) identified four main areas where making community contributions could benefit people in later life:

- Mental and physical health
- Social connections
- Wellbeing and sense of purpose
- Employability

The evidence base for these benefits is summarised in Figure 4, page 11. These areas are interconnected. The evidence also suggests they may be both a cause and a consequence, leading people to contribute as well as resulting from making a contribution.

Figure 2 Diagram showing causal relationship from making a contribution



There seems to be a stronger relationship between contributing and health and wellbeing for older people, as compared to younger people (Casiday et al., 2008; Li & Ferraro, 2006; Tabassum et al., 2016; Van Willigen, 2000). This suggests that people in later life can benefit particularly from making a contribution, although it also highlights that poor health and wellbeing and lack of social connections are more likely to act as barriers to contribution in later life.

The second general finding is that people with higher levels of health, wealth and wellbeing seem to be more likely to contribute in the first place. While statistically significant differences in outcomes are still seen after controlling for these factors, the benefits are not transformational – 'we should not expect miracles' (de Wit et al., 2015).

Figure 3: Search strategy

A scan was conducted of literature that describes the benefits for older people of making community contributions in the AgeLine, MEDLINE, and Academic Search R&D databases. Further evidence was identified through a snowball search of citations in key documents and a Google search for significant grey literature.

The following search terms were used:

- older people; out-of-home activity; and volunteering;
- community partnership; older adults; pro-social behaviour;
- randomised controlled trial [or] regression analysis;
- civic participation [or] civic engagement [and] older people [or older adults]

We have published a schedule of the literature consulted for this review as a separate annexe. This includes methodology, country, key findings, and details of sample size, statistical significance and limitations where appropriate.

Figure 4 The benefits of making a contribution to your community in later life: summary of evidence

Benefits	Formal volunteering	Informal contributions		
Reduced	Consistent evidence of	No evidence of benefit for informal		
depression	benefit from feeling valued	helping in general (cohort studies		
	for volunteering (large-scale	don't show association); experimental		
	cohort studies)	evidence that peer support for life-		
		limiting conditions reduces depression		
Social	Consistent evidence of benefit	Consistent evidence of benefit (large-		
connections	(large-scale cohort studies)	scale cohort studies)		
Wellbeing	Consistent evidence of benefit	Consistent evidence of benefit (large-		
	(large-scale cohort studies)	scale cohort studies)		
Physical health	Consistent association with	Consistent association with better self-		
	better self-reported health,	reported health (large-scale cohort		
	evidence of limited but	studies)		
	significant effect on mortality			
	(large-scale cohort studies)			
Sense of	Limited evidence of benefit	Limited evidence of benefit (smaller		
purpose	(smaller quantitative and	quantitative and qualitative studies)		
	qualitative studies)			
Employment	Mixed evidence (large-scale	No evidence of benefit (one cohort		
	cohort studies show positive	study shows negative association,		
	and negative associations in	otherwise very limited evidence base)		
	different contexts)			
Reduced	No evidence of benefit (cohort	No evidence found		
isolation	study found no association)			

Terms used in this table:

Evidence of benefit:

- a) Multivariate and dose-response analysis of cohort study show statistically significant effects
- b) Experimental evidence shows cause-effect relationship (only for peer support in this case)

Consistent evidence of benefit:

- a) Systematic review / meta-analysis confirms the evidence of benefit from multiple studies
- b) In the absence of a systematic review, multiple cohort studies generate consistent findings

Limited evidence of benefit: Small-scale observational and/or qualitative data that supports the possible effect, but a lack of larger scale and/or longitudinal data

Association: Observational data shows association with volunteering activity

Consistent association: Multiple observational datasets show this association

Mixed evidence: Observational data is mixed on whether or not there is an association

No evidence of benefit: Observational data finds no association and/or negative association

No evidence found: Our review did not find any evidence on this question

Health

A host of studies have found that both formal and informal volunteering in later life are associated with improvements in a range of health measures. A critical review of 73 papers describing 'descriptive, cross-sectional, and prospective cohort studies, and one randomised controlled trial' found that in most, volunteering was associated with reduced symptoms of depression, better self-reported health, fewer functional limitations and lower mortality (Anderson et al., 2014).

The strongest evidence is that formal volunteering benefits older people's mental health and reduces levels of depression (Anderson et al., 2014; Jenkinson et al., 2013; Mundle et al., 2012; Tabassum et al., 2016). Analysis of data from the English Longitudinal Study of Ageing (ELSA; n=3632) showed that volunteering reduced depression over a period of two years, although with a reduction of 0.2 points on a scale from 0 to 8 after controlling for other factors, the effects are relatively small (Nazroo & Matthews, 2012). Some studies show an association between volunteering and cognitive function (Infurna et al., 2016; Schwingel et al., 2009).

Although formal volunteering is associated with reduced odds of depression, a number of panel studies have found that helping people informally does not generally show the same association (Li & Ferraro, 2005; Kahana et al., 2013; Potocnik & Sonnentag, 2013). On the other hand, peer support networks, with their core principles of reciprocity and social interaction, do seem to have mental health benefits (Repper & Carter, 2010) – there is strong experimental evidence from randomised controlled trials that peer support is as effective as psychotherapy is at helping men with prostate cancer to avoid depression, along with psychotherapy (Newby et al., 2015).

The evidence is not clear whether making a contribution has a positive effect on physical health, although it is consistently associated with feeling better. Reviews of experimental and longitudinal studies of volunteering in later life consistently show better self-rated health, physical functioning, physical activity and life satisfaction as well as decreased depression and mortality,

but they do not show a change in the risk of chronic diseases or nursing home admission in old age (Jenkinson et al., 2013; Lum & Lightfoot, 2005; von Bonsdorff & Rantanen, 2011). Given that healthier people are much more likely to volunteer in the first place, it is unclear to what extent volunteering is a cause, rather than an effect, of improved health (Mundle et al., 2012). Most of the evidence comes from observational studies, which makes it harder to control for this possible selection effect. One analysis of six large European cohort datasets estimated that 'at least 70% of the difference' between volunteers and non-volunteers is the result of selection effects (de Wit et al., 2015).

However, a meta-analysis of cohort studies found a small but significant reduction in mortality risk for volunteers, allowing for demographic, economic, lifestyle and baseline health characteristics (Jenkinson et al., 2013). There is evidence that social connections and a sense of meaning are both associated with greater longevity – and as the next sections discuss, the evidence that making a contribution in later life leads to these benefits is stronger. These factors seem likely to be the drivers of any health benefits.

Figure 5: Benefits of volunteering in later life: findings from Experience Corps

Experience Corps is a 'high-commitment' volunteer programme in the United States that brings older adults into schools to improve students' academic performance while, at the same time, serving as a means for health promotion for participating volunteers.

It has furnished a rich body of evidence on the benefits of volunteering, including:

Health

- Increase in **walking activity** among older female volunteers at elevated risk for inactivity and adverse health outcomes (Varma et al., 2016)
- Significantly smaller reductions in **walking speed** compared to controls (Fried et al., 2004)
- Increased overall activity level (Tan et al., 2009) especially intellectual and physical activities 12 months post-baseline (Parisi et al., 2015) and strength (Fried et al., 2004)
- Fewer depressive symptoms and functional limitations after two years, and a statistical trend towards slower decline in self-rated health (Hong and Morrow-Howell, 2010)
- Improved **executive function** and **memory**, increased **brain activity** in older adults including those at elevated risk for cognitive impairment (Carlson et al., 2008, 2009, 2015)

Social connections

- More people one could turn to for **help** (Fried et al., 2004)
- Increased **social connections** that led to new work, volunteering, educational or other community activities (Morrow-Howell et al., 2014)
- Improved bonding/making social connections (Varma et al., 2015)

Wellbeing and sense of purpose

- Increased **confidence**, increased realisation of the importance of organized activities/ daily structure (Morrow-Howell et al., 2014)
- Improved personal **enjoyment**, **self-enhancement/achievement**, and being/feeling **more active** (Varma et al., 2015)
- Increases in levels of **desire and concern to benefit others** and perceptions of having helped others (Gruenewald et al., 2016)

Social connections

Social connections are an essential element of a good later life. There is a significant body of evidence that the frequency and depth of interactions with others, as well as the number of people within an individual's social network, are important for a person's physical and mental wellbeing, quality of life and future life satisfaction (Cohen et al., 1997; Diener & Oishi, 2006; Diener & Seligman, 2002; Hilding et al., 2015; Kreibig et al., 2014; Rafnsson et al., 2015; Yang et al., 2013).

There is evidence that both formal and informal volunteering result in an increase in the number and quality of social connections. Analysis of five large longitudinal European datasets (n=99,313), found a consistent association between helping others and enhanced social connections:

People who start volunteering increase the scope and quality of their [social] network more strongly than those who remain uninvolved" (de Wit et al., 2015)

Again, it is not straightforward to unpack the causal relationship – there is also evidence that a wider and stronger network of social connections makes people more likely to volunteer in the first place (Morrow-Howell, 2010; Dury et al., 2014). Given that small but significant effects remain after controlling for these characteristics, it seems reasonable to conclude that social factors 'may influence both willingness to engage in volunteering, as well as the benefits that might accrue' – in other words, that social connections are both a cause and an effect (Jenkinson et al., 2013).

A range of smaller studies support this view, suggesting that volunteering can help people in later life expand social interactions, improve social skills and obtain social support (e.g. Prouteau & Wolff, 2008; Wilson & Musick, 2000). For example, a study of 13 different volunteer programmes in the United States reported that 56.9% of respondents (n=401) agreed that they had enlarged their circle of friends and acquaintances since joining and 56.4% agreed that the programme had increased their social activities (Morrow-Howell et al., 2009).

Qualitative studies have highlighted the importance of **reciprocity and mutual support** within these connections. Several small studies from Australia and New Zealand show that older volunteers enjoy mutually beneficial interactions and benefit from increased 'little kindnesses' and social support as a result (Kuehne & Sears, 1993; Pilkington et al., 2012; Warburton & McLaughlin, 2005).

Some voluntary activities are specifically designed to build social connections and mutual exchange. Qualitative studies of **peer support** groups for long-term health conditions underline the importance of helping others as well as support, understanding and acceptance from

others (Morris et al., 2011; Morris & Morris, 2012; Munn-Giddings & McVicar, 2007). Similarly, evaluations of time banks and neighbourhood care schemes suggest that they can be effective in mitigating loneliness, improving emotional well-being and supporting older volunteers to maintain their health and independence (Narushima, 2005; Seyfang, 2006; Trickey et al., 2008; Windle, 2015).

The literature confirms that loneliness and isolation are associated with lower levels of wellbeing in older adults (Shankar et al., 2015) and the life changes typical of later life, including retirement and bereavement, can put older people at increased risk of social isolation by reducing their social connections. However, there is less evidence that volunteering is effective in tackling isolation. For example, analysis of English Longitudinal Study of Ageing data demonstrated no statistically significant difference in levels of social isolation between volunteers and non-volunteers (Nazroo & Matthews, 2012).

Wellbeing and sense of purpose

Improved life satisfaction has been cited as one of the most important benefits that volunteering can bring to people in later life (Casiday et al., 2008). Whether it is measured in terms of reciprocity, task satisfaction, sense of purpose, self-esteem or happiness, there is consistent evidence from large scale cohort studies that formal and informal volunteering have a positive

"

Individuals with even a minimal amount of participation in volunteering activities appeared to have better mental well-being compared to those who were not involved at all" (*Tabassum et al., 2016*)

For people enrolled in the British Household Panel Survey, not being able to volunteer after having been a frequent volunteer, resulted in a 1.9% reduction in life satisfaction (Fujiwara et al., 2013). Similarly, a statistically significant difference in perceived quality of life and life satisfaction was seen at the end of a two-year period between non-volunteers and those who felt appreciated for volunteering in a cross sectional analysis of data from ELSA (McMunn et al., 2009). Longitudinal studies show that providing help informally results in statistically significant improvements to life satisfaction and quality of life scores over time that are similar to those produced by formal volunteering (Kahana et al., 2013; Potoconik & Sonnentag, 2013).

There is evidence for a causal relationship, with cohort and panel data suggesting a dose-response effect – greater levels of contribution have a greater effect and vice versa. For example, meta-analysis of European cohort datasets found a statistically significant improvement in subjective wellbeing for those who begin making a contribution, versus those who do not, and a statistically significant decline in wellbeing for those who stop (de Wit et al., 2015). Time spent volunteering was a unique predictor of overall level of happiness in a study of older New Zealanders (n=1028; Dulin et al., 2012). Analysis of Americans' Changing Lives panel data

(n=2,867) found a positive and statistically significant association between volunteer hours and satisfaction – that is, level of life satisfaction increased with level of commitment (Van Willigen, 2000).

The literature suggests that making a contribution can help people to construct a sense of purpose in later life, providing a meaningful role, social and personal identity, and structure for daily life (e.g. Bradley, 2000; Morrow-Howell et al., 2009; Narushima, 2005). There is a wealth of evidence that feeling your life has meaning is associated with lower rates of cancer, heart disease, disability and cognitive decline, as well as increased longevity (Buettner, 2008; Boyle et al., 2010a, 2010b; Hill & Turiano, 2014; Hill et al., 2015; Krause, 2009; Skrabski et al., 2005).

Formal volunteering has been reported to result in improvements in older adults' self-esteem; personal satisfaction in a task well done; and a greater sense of control over life (Cheung & Kwan, 2006; Koenig, 2002; Rabin & McKenzie, 2014; Thoits & Hewitt, 2001). Interestingly, analysis of data from 3,617 participants aged 60+ in the Americans' Changing Lives Survey suggested that while formal volunteering did not bolster feelings of personal control in later life, giving informal assistance to others did (Krause et al., 1992).

Figure 6: Men's Sheds

Men's Sheds are non-profit organisations that originated in Australia in 1995 to promote social interaction and quality of life for (usually) older men by providing a space where they can socialise while participating in a range of woodwork and other practical activities. There are now over 350 Men's Sheds in the UK with over 7,000 members.

Studies of participants in Men's Sheds have demonstrated remarkable consistency in the evidence base for a positive effect on older men's physical and mental health, and social and emotional wellbeing, generated by greater intellectual stimulation and sense of meaningful role (Milligan et al., 2013 – a review of 11 Australian, one Canadian and two UK studies).

A route to employment

There is some support in the literature for an association between volunteering and entering employment. For example, one study of 70,000 unemployed people in the US found that those who volunteered had a 27% higher likelihood of being employed after one year than those who did not, with proportions rising to 51% for those without a high school diploma (Spera et al., 2015). Longitudinal analysis of the British Household Panel Survey showed that volunteering was associated with an increased chance of returning to work for older adults, although the effect was not very strong (Paine et al., 2013).

In contrast, analysis of six large-scale European datasets (n=154,970) found 'no robust evidence that voluntary engagement keeps people in employment, or brings them back into labour after unemployment' (de Wit et al., 2015). Similarly, the British Household Panel Survey data showed that volunteering had no effect on whether people aged 45–60 years remained in work (Paine et al., 2013). A number of studies have noted that it is difficult to demonstrate a straightforward, linear causal link between volunteering, employability and employment (e.g. Cordon & Ellis, 2004; Nazroo, 2015; Smith, 2010).

An observational study of 2,236 Americans aged 50–68 argued that paid work and volunteering both draw on the same pre-existing forms of social and cultural capital (Carr & Kail, 2012). As a result, either activity may facilitate the other – for example, volunteering may foster contacts that lead to new employment opportunities, while remaining in the workforce may sustain connections that open opportunities to volunteer. Equally, however, either activity may 'use up' resources and therefore hinder the other – for example, time spent volunteering may limit time spent seeking employment, and vice versa.

A recent review of the literature suggests that market conditions and employer preferences are likely to be more significant determinants of employment outcomes than volunteering.

Volunteering in general has a relatively weak effect on the move into employment ... if there are no suitable jobs, no amount of volunteering will help, however focused."

(Kamerade & Paine, 2014)



5. Who benefits and under what circumstances?

The evidence outlined above suggests that people in later life can benefit from contributing to their community – especially in terms of mental health, social connections and wellbeing. It is also important to understand who is currently making contributions, and consider any differences in whether and how they are benefiting.

Who contributes?

Most people in later life already make some form of contribution to their community – whether formal or civic volunteering, informal help or neighbourliness. The Community Life Survey shows that over two thirds of 50–74-year olds participated in some sort of volunteering in 2015–2016 (Figure 7). Participation rates for all types of activity were highest among those aged 65–74 years.

Figure 7 Percentage of respondents (n=3027) engaging in community contributions, 2015–2016

Age (years)				
Type of community contribution	16-49	50-64	65-74	>75
Formal volunteering (once a month or more)	26	27	31	24
Informal volunteering (once a month or more)	34	29	38	36
Civic action (at least once a year)	16	21	22	14

However, levels of activity vary significantly between individuals. Analysis of three waves of the UK Citizenship Survey identified a 'civic core', a group of around a third of the population, responsible for approximately four fifths of all volunteering, charitable giving and civic participation (Mohan & Bulloch, 2012). At the other end of the scale is a smaller group of people who report no contributions of any kind, with roughly half the population somewhere in the middle. People aged 50 and over are more likely to be highly committed (they make up approximately 30% of the population and approximately 40% of the civic core), but they are also more likely to report making no contribution (approximately 45% of 'disengaged' respondents are aged 50 or over).

These disparities reflect the pronounced inequalities in health and income that are seen in

later life. Those people making frequent contributions in later life are likely also to be relatively well-off and healthy. Rates of formal volunteering are closely correlated with levels of wealth and health. (See Figures 8, 9, 10).

Figure 8 Age distribution for extremes of contribution, 2007-10

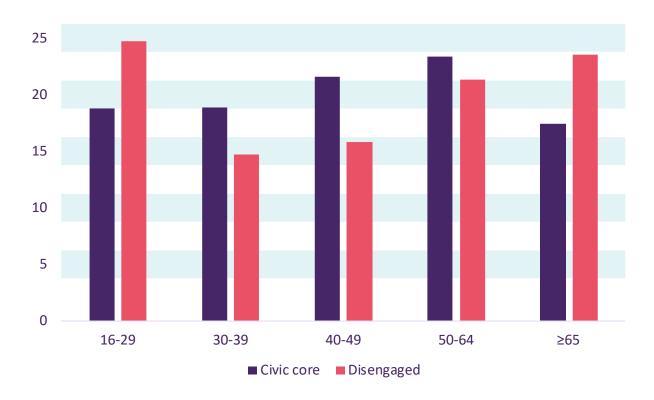


Figure 9 Levels of contribution by health status

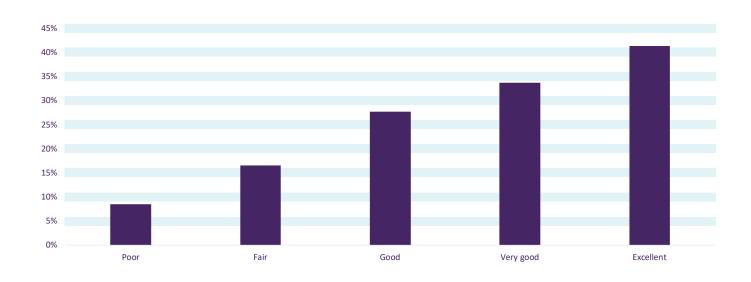
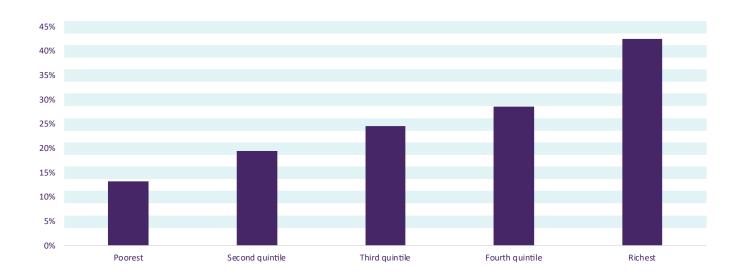


Figure 10 Levels of contribution by wealth



Studies also suggest that people who already have the highest levels of wellbeing and good or excellent mental health do the lion's share of formal volunteering (Ahn et al., 2011; Morrow-Howell, 2009, 2010). Interestingly, however, the Survey on Health, Ageing and Retirement in Europe revealed no difference in rates of 'providing help' – i.e. informal volunteering and neighbourly support – by socioeconomic status (Potocnik & Sonnentag, 2013).

Who benefits?

People who have more to gain – Assets

There is some evidence in the literature that the greatest benefits from volunteering in later life accrue to people with the least: fewer personal and social resources, including fewer roles as parents, spouses or employees; lower income; lower educational attainment; and/or fair (rather than good or excellent) health (Barron, et al.,2009; Carlson, 2011; Morrow-Howell et al.,2009, 2010; Musick et al., 1999). Similarly, disabled older people who volunteer have a lower mortality risk than those who don't – so while it may be harder for them to volunteer, they may receive important benefits from doing so (Okun et al., 2010).

One suggestion is that people with more social, personal and financial resources already have other opportunities to gain the kinds of benefit that volunteering offers. Older adults with lower levels of informal social contact in other areas of their life, or with lower levels of income or education, may have a greater need for these benefits, as well as fewer alternative ways to achieve them.

People who are most open to benefiting – Attitude

It has also been suggested that the variation in improvements in life satisfaction due to volunteering is simply the result of underlying personality characteristics (Fujiwara et al., 2013). For example, the Baltimore Experience Corps Trial with volunteers aged 60 years and over showed that participants with more positive perceptions of ageing at baseline had made more new friends two years later and had gained more in terms of the perceived support available to them 12 months later (Menkin et al., 2016). Some studies argue strongly that 'it was not simply the case that volunteers are the kind of people who are more satisfied with their lives and healthier in the first place' (Van Willigen, 2000). However, meta-analysis of longitudinal datasets has shown that health, social connections, wellbeing and employment are relatively stable over time, and that selection effects account for the majority of reported outcomes – that is, people bring most of these 'benefits' with them already (de Wit et al., 2015).

People who don't want to benefit - Altruism

The benefits associated with volunteering in later life seem to relate to altruism and reciprocity. For example, reductions in mortality rates among volunteers compared with non-volunteers are observed only for those who engage in volunteering for altruistic rather than more selfish reasons (Konrath et al., 2011). Likewise, the strongest effects on health have been seen for people who volunteer for organisations with a service orientation, rather than organisations that exist for the benefit of members alone (Onyx & Warburton, 2003).

The volunteering role – Activities

What people do and how they are supported are important determinants of any benefit they derive. In one study, volunteers derived greater benefit from involvement in direct caring roles (such as peer support, social support of older people, and organising activities for people with disabilities) than from more superficial roles (Casiday et al., 2008). Multivariate analysis of cohort datasets shows that making a contribution is only positively associated with improvements in depression, quality of life, life satisfaction and social isolation when people feel their activities are appreciated (McMunn et al., 2009; Nazroo & Matthews, 2012; Wahrendorf et al., 2006).

High intensity volunteering, especially outdoor / environmental activities, have been shown to be associated with a sustained increase in levels of physical activity (Tan et al., 2006, 2009) which could in turn lead to functional and physical health benefits. The evidence is mixed on how much activity you need to do in order to benefit, with studies suggesting at least 40 hours or at least 100 hours per year, or in one case suggesting that 100 hours per year is a ceiling after which there is no further benefit (Luoh & Herzog, 2002; Musick et al., 1999; Van Willigen, 2000).

6. Recommendations

The evidence shows that older people who contribute to the community develop more and better social connections, an enhanced sense of purpose and meaning, and improved life satisfaction and wellbeing. Whilst making a contribution has clear benefits, it is not a miracle cure. There is limited evidence that contributing leads to improved physical health or employment outcomes, and it does not seem to make a difference to more severe problems such as social isolation or frailty.

People who are less wealthy, have more limited social connections and less activity in their lives are likely to benefit most from making a contribution, but they are also less likely to participate – not least because they face additional barriers and have access to fewer opportunities. The kinds of activities also make a difference. Being recognised and appreciated for volunteering is particularly important – underappreciated volunteers do not necessarily gain the same benefits.

People, groups and organisations working with older volunteers

When recruiting volunteers or securing funding, those working in this area can confidently state that making a contribution makes a difference to wellbeing and social connections.

However, they should also avoid overclaiming – volunteering alone was not found to make a significant difference in terms of physical health, frailty, social isolation or employability.

To maximise the benefits of participation, they should focus on recruiting and supporting older people with lower income, lower education, fewer social connections, fair (rather than good or excellent) health and/or disabilities, as well as lower wellbeing. Where this requires new approaches or additional resources, they should be confident in making the case for these.

They should also seek to ensure that older people have meaningful roles, with opportunities for social interaction and mutual support, and are recognised and valued for their contribution. Roles that entail increased physical or cognitive activity are also likely to be beneficial.

Funders and commissioners

Rather than commissioning further evaluation of wellbeing outcomes, funders should seek assurance that people in later life are being involved in meaningful social activities, and valued for their contribution – the evidence shows that this leads to positive outcomes.

Funders should encourage activities with/for older people with lower levels of income,

education, social engagement and health, and meet additional costs involved in supporting them to participate.

Funders should not support activities which rely only on encouraging voluntary activities to address serious issues of physical health, frailty, social isolation or employment in later life.

Health, care and support organisations working with people in later life

These findings are also relevant to those seeking to help people in later life, such as health and care providers, who should consider encouraging or supporting older people to identify opportunities to make a meaningful and valued contribution to the community.

Researchers

Finally, this review has highlighted some key areas for further investigation:

- How disadvantaged older people currently contribute to their communities, their motivations, the barriers they face, and how they could be better supported
- Whether and how non-formal and non-traditional forms of voluntary contribution benefit older participants, and in what circumstances

Bibliography

Ahn, S., Phillips, K., Smith, M. & Ory, M. (2011) Correlates of volunteering among aging Texans: The roles of health indicators, spirituality, and social engagement. Maturitas. 69 (3), 257–262.

Allen M., Spandler H., Prendergast Y., Froggett L. (2015) Landscapes of helping: kindliness in neighbourhoods and communities. Joseph Rowntree Foundation. Available from: https://www.jrf.org.uk/report/landscapes-helping-kindliness-neighbourhoods-and-communities. [Accessed 25th October 2016].

Anderson, N.D., Damianakis, T., Kröger, E., Wagner, L.M., Dawson, D.R., Binns, M.A., Bernstein, S., Caspi, E. & Cook, S.L. (2014) The benefits associated with volunteering among seniors: A critical review and recommendations for future research. Psychological Bulletin. 140 (6), 1505–1533.

Banks, J., Batty, G.D., Nazroo, J., Steptoe, A. (2016) The dynamics of ageing: evidence from the English Longitudinal Study of Ageing 2002-15 (Wave 7) Available from: http://www.elsa-project. ac.uk/publicationDetails/id/8696 [Accessed 24th October 2016].

Barron, J.S., Tan, E.J., Yu, Q., Song, M., McGill, S. & Fried, L.P. (2009) Potential for intensive volunteering to promote the health of older adults in fair health. Journal of Urban Health, 86 (4), 641–653.

Boyle, P.A., Buchman, A.S., Barnes, L.L. & Bennett, D.A. (2010a) Effect of a purpose in life on risk of incident Alzheimer disease and mild cognitive impairment in community-dwelling older persons. Archives of General Psychiatry, 67 (3), 304–310.

Boyle, P.A., Buchman, A.S. & Bennett, D.A. (2010b) Purpose in life is associated with a reduced risk of incident disability among community-dwelling older persons. American Journal of Geriatric Psychiatry. 18 (12), 1093–1102.

Bradley, DB. (1999–2000) Reason to rise each morning: the meaning of volunteering in the lives of older adults. Generations. 23 (4), 45–50.

Buettner, D. (2008) Find purpose, live longer. AARP The Magazine. Available from: http://www.aarp.org/health/longevity/info-09-2008/find_purpose_live_longer.html. [Accessed 9th December 2016].

Cabinet Office (2016) Community Life Survey 2015 to 2016 Available from: https://www.gov.uk/government/publications/community-life-survey-2015-to-2016-data. [Accessed 8th November 2016].

Carlson, M.C., Saczynski, J.S., Rebok, G.W., Seeman, T., Glass, T.A., McGill, S., Tielsch, J., Frick, K.D., Hill, J. & Fried, L.P. (2008) Exploring the effects of an "everyday" activity program on executive function and memory in older adults: Experience Corps. Gerontologist. 48 (6), 793–801.

Carlson, M.C., Erickson, K.I., Kramer, A.F., Voss, M.W., Bolea, N., Mielke, M., McGill, S., Rebok, G.W., Seeman, T. & Fried, L.P. (2009) Evidence for neurocognitive plasticity in at-risk older adults: the experience corps program. Journals of Gerontology Series A: Biological Sciences and Medical Sciences. 64 (12), 1275–1282.

Carlson, M.C. (2011) Promoting healthy, meaningful aging through social involvement: building an experience corps. Cerebrum. May 2011, 10.

Carlson, M.C., Kuo, J.H., Chuang, Y.F., Varma, V.R., Harris, G., Albert, M.S., Erickson, K.I., Kramer, A.F., Parisi, J.M., Xue, Q.L., Tan, E.J., Tanner, E.K., Gross, A.L., Seeman, T.E., Gruenewald, T.L., McGill, S., Rebok, G.W. & Fried, L.P. (2015) Impact of the Baltimore Experience Corps Trial on cortical and hippocampal volumes. Alzheimers Dementia. 11 (11), 1340–1348.

Carr, D.C. & Kail, B.L. (2012) The influence of unpaid work on the transition out of fulltime paid work. Gerontologist. 53 (1), 92–101.

Casiday R., Kinsman E., Fisher C., Bambra C. (2008) Volunteering and Health: What impact does it really have? Report to Volunteering England. London, Volunteering England.

Cheung, C-K. & Kwan, A. (2006) Inducting older adults into volunteer work to sustain their psychological well-being. Ageing International, 31, pp. 44–58.

Cohen, S., Doyle, W.J., Skoner, D.P., Rabin, B.S. & Gwaltney, J.M., Jr. (1997) Social ties and susceptibility to the common cold. Journal of the American Medical Association. 277 (24), 1940–1944.

Corden, A. & Ellis, A. (2004) Volunteering and employability: Exploring the link for incapacity benefits recipients. Benefits. 12 (2), 112–118.

De Wit, A., Bekkers, R., Karamat Ali, D., & Verkaik, D. (2015) Welfare impacts of participation: report for Impact of the Third Sector as Social Innovation project, Brussels: European Commission, DG Research.

Diener, E. & Oishi, S. (2006) The nonobvious social psychology of happiness. Psychological Inquiry. 16 (4), 162–167.

Diener, E. & Seligman, M.E.P. (2002) Very happy people. Psychological Science. 13 (1), 81–84.

Dulin, P.L., Gavala, J., Stephens, C., Kostick, M. & McDonald, J. (2012) Volunteering predicts happiness among older Mori and non-Mori in the New Zealand health, work, and retirement longitudinal study. Aging and Mental Health. 16 (5), 617–624.

Fiorillo, D. & Nappo, N. (2014) Formal and informal volunteering and health across European countries. MPRA Paper No. 54130. Available from: http://mpra.ub.uni-muenchen.de/54130/. [Accessed on 11th November 2016].

Fiorillo, D. & Nappo, N. (2015) Formal volunteering and self-perceived health: Causal evidence from the UK-SILC, York University working paper, York: University of York.

Fried, L.P., Carlson, M.C., Freedman, M., Frick, K.D., Glass, T.A., Hill, J., McGill, S., Rebok, G.W., Seeman, T., Tielsch, J., Wasik, B.A. & Zeger, S. (2004) A social model for health promotion for an aging population: initial evidence on the Experience Corps model. Journal of Urban Health. 81 (1), 64–78.

Fujiwara D, Oroyemi P, McKinnon E (2013) Wellbeing and civil society: Estimating the value of volunteering using subjective wellbeing data, Department of Work and Pensions. Working paper 112. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221227/WP112.pdf [Accessed 29th October 2016].

Greenfield, E. & Marks, N. (2004) Formal volunteering as a protective factor for older adults' psychological well-being. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 59 (5), S258–S264.

Gruenewald, T.L., Tanner, E.K., Fried, L.P., Carlson, M.C., Xue, Q.L., Parisi, J.M., Rebok, G.W., Yarnell, L.M. & Seeman, T.E. (2016) The Baltimore Experience Corps Trial: Enhancing Generativity via Intergenerational Activity Engagement in Later Life. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 71 (4), 661–670.

Hilding, A., Shen, C. & Östenson, C.G. (2015) Social network and development of prediabetes and type 2 diabetes in middle-aged Swedish women and men. Diabetes Research and Clinical Practice. 107 (1), 166–177.

Hill, P.L., Turiano, N.A., Spiro, A. & Mroczek, D.K. (2015) Understanding inter-individual variability in purpose in life: longitudinal findings from the VA Normative Aging Study. Psychological Aging. 30 (3), 529–533.

Hill, P.L. & Turiano, N.A. (2014) Purpose in life as a predictor of mortality across adulthood. Psychological Science. 25 (7), 1482–1486.

Hong, S.I. & Morrow-Howell, N. (2010) Health outcomes of Experience Corps: a high-commitment volunteer program. Social Science and Medicine. 71 (2), 414–420.

Infurna, F.J., Okun, M.A. & Grimm, K.J. (2016) Volunteering is associated with lower risk of cognitive impairment. Journal of the American Geriatric Society. 64 (11), 2263–2269.

Jenkinson, C., Dickens, A., Jones, K., Thompson-Coon, J., Taylor, R.S., Rogers, M., Bambra, C.L., Lang, I. & Richards, S.H. (2013) Is volunteering a public health intervention? A systematic review and meta-analysis of the health and survival of volunteers. BMC Public Health. 13, 773.

Jung, Y., Gruenewald, T.L., Seeman, T.E. & Sarkisian, C.A. (2010) Productive activities and development of frailty in older adults. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 65B (2), 256–261.

Kahana, E., Bhatta, T., Lovegreen, L., Kahana, B., & Midlarsky, E. (2013) Altruism, helping, and volunteering: pathways to well-being in late life. Journal of Aging Health. 25 (1), 159–187.

Kamerade, D. & Ellis Paine, A. (2014) Volunteering and employability: implications for policy and practice. Voluntary Sector Review. 5 (2), 259–273.

Koenig, HG. (2002) Purpose and power in retirement: new opportunities for meaning and significance. Templeton Foundation Press, Philadelphia, PA, 2002.

Konrath, S., Fuhrel-Forbis, A., Lou, A. & Brown, S. (2011) Motives for volunteering are associated with mortality risk in older adults. Health Psychology. 31(1), 87–96.

Krause, N., Herzog, A.R. & Baker, E. (1992) Providing support to others and well-being in later life. Journal of Gerontology. 47 (5), P300–311.

Krause, N. (2009) Meaning in life and mortality. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 64B (4), 517–527.

Kreibig, S.D., Whooley, M.A. & Gross, J.J. (2014) Social integration and mortality in patients with coronary heart disease: findings from the Heart and Soul Study. Psychosomatic Medicine. 76 (8), 659–668.

Kuehne, V.S. & Sears, H.A. (1993) Beyond the call of duty: older volunteers committed to children and families. Journal of Applied Gerontology. 12 (4), 425–438.

Li, Y. & Ferraro, K.F. (2005) Volunteering and depression in later life: social benefit or selection processes? Journal of Health and Social Behavior. 46 (1), 68–84.

Li, Y. & Ferraro, K.F. (2006) Volunteering in middle and later life: is health a benefit, barrier or both? Social forces. 85 (1), 497–520.

Lum, T.Y. & Lightfoot, E. (2005) The effects of volunteering on the physical and mental health of older people. Research on Aging. 27 (1), 31–55.

Luoh, M.C. & Herzog, A.R. (2002) Individual consequences of volunteer and paid work in old age: health and mortality. Journal of Health and Social Behavior. 43 (4), 490–509.

McMunn, A., Nazroo, J., Wahrendorf, M., Breeze, E. & Zaninotto, P. (2009) Participation in socially-productive activities, reciprocity and wellbeing in later life: baseline results in England. Ageing and Society. 29 (5), 765–782.

Menkin, J.A., Robles, T.F., Gruenewald, T.L., Tanner, E.K. & Seeman, T.E. (2016) Positive expectations regarding aging linked to more new friends in later life. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences.

Milligan, C., Dowrick, C., Payne, S., Hanratty, B. et al (2013) Men's Sheds and other gendered interventions for older men: improving health and wellbeing through social activity: A systematic review and scoping of the evidence base, Lancaster: Lancaster University Centre for Ageing Research.

Mohan J, Bulloch SL. (2102) The idea of a 'civic core': what are the overlaps between charitable giving, volunteering, and civic participation in England and Wales? Third Sector Research Centre (TSRC) Working Paper 73, February 2012.

Morris, B.A., Campbell, M., Dwyer, M., Dunn, J. & Chambers, S.K. (2011) Survivor identity and post-traumatic growth after participating in challenge-based peer-support programmes. British Journal of Health Psychology. 16 (3), 660–674.

Morris, R. & Morris, P. (2012) Participants' experiences of hospital-based peer support groups for stroke patients and carers. Disability and Rehabilitation. 34 (4), 347–354.

Morrow-Howell, N., Hinterlong, J., Rozario, P.A. & Tang, F. (2003) Effects of volunteering on the well-being of older adults. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 58 (3), S137–S145.

Morrow-Howell, N., Hong, S.I. & Tang, F. (2009) Who benefits from volunteering? Variations in perceived benefits. The Gerontologist. 49 (1), 91–102.

Morrow-Howell, N. (2010) Volunteering in later life: research frontiers. Journal of Gerontology: Social Sciences. 65B (4), 461–469.

Morrow-Howell, N., Lee, Y.S., McCrary, S. & McBride, A. (2014) Volunteering as a pathway to productive and social engagement among older adults. Health Education and Behavior. 41 (1 Suppl), 84S–90S.

Mundle, C., Naylor, C., Buck, D. (2012) Volunteering in health and care in England: a summary of key literature, London: Kings Fund.

Munn-Giddings, C. & McVicar, A. (2007) Self-help groups as mutual support: what do carers value? Health and Social Care in the Community, 15 (1), 26–34.

Musick, M.A., Herzog, A.R. & House, J.S. (1999) Volunteering and mortality among older adults: findings from a national sample. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 54 (3), S173–S180.

Musick, M.A. & Wilson, J. (2003) Volunteering and depression: the role of psychological and social resources in different age groups. Social Science and Medicine. 56 (2), 259–269.

Narushima, M. (2005) 'Payback time': community volunteering among older adults as a transformative mechanism. Ageing and Society, 25 (4), 567–584.

Nazroo, J. (2015) Volunteering, providing informal care and paid employment in later life: Role occupancy and implications for well-being - Future of Ageing: Evidence Review, London: Government Office for Science.

Nazroo, J. and Matthews, K. (2012) The impact of volunteering on well-being in later life, London: (WRVS) Royal Voluntary Services.

Newby, T.A., Graff, J.N., Ganzini, L.K. & McDonagh, M.S. (2015) Interventions that may reduce depressive symptoms among prostate cancer patients: a systematic review and meta-analysis. Psychooncology. 24 (12), 1686–1693.

Okun, M., August, K., Rook, K. & Newsom, J. (2010) Does volunteering moderate the relation between functional limitations and mortality? Social Science and Medicine. 71 (9), 1662–1668.

Onyx, J. & Warburton, J. (2003) Volunteering and health among older people: a review. Australasian Journal on Ageing. 22 (2), 65–69.

Paine, A.E., McKay, S. & Moro, D. (2013) Does volunteering improve employability? Insights from the British Household Panel Survey and beyond. Voluntary Sector Review. 4 (3), 355–376.

Parisi, J.M., Kuo, J., Rebok, G.W., Xue, Q.L., Fried, L.P., Gruenewald, T.L., Huang, J., Seeman, T.E., Roth, D.L., Tanner, E.K., & Carlson, M.C. (2015) Increases in lifestyle activities as a result of Experience Corps® participation. Journal of Urban Health. 92 (1), 55–66.

Pilkington, P.D., Windsor, T.D. & Crisp, D.A. (2012) Volunteering and subjective well-being in midlife and older adults: the role of supportive social networks. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 67 (2), 249–260.

Potocnik, K. & Sonnentag, S. (2013) A longitudinal study of well-being in older workers and retirees: The role of engaging in different types of activities. Journal of Occupational and Organizational Psychology. 86 (4), 497–521.

Prouteau, L. & Wolff, F-C. (2006) Does volunteer work pay off in the labour market? The Journal of Socio-Economics. 35 (6), 992–1013.

Prouteau, L. & Wolff, F-C. (2008) On the relational motive for volunteer work. Journal of Economic Psychology. 29 (3), 314–335.

Rabin, S. & McKenzie, D. (2014), A better offer: the future of volunteering in an ageing society, London: Commission on the Voluntary Sector and Aging.

Rafnsson, S.B., Shankar, A. & Steptoe, A. (2015) Longitudinal influences of social network characteristics on subjective well-being of older adults: findings from the ELSA study. Journal of Aging Health 27 (5), 919–934.

Repper, J. & Carter T. (2010) Using personal experience to support others with similar difficulties. A review of the literature on peer support in mental health services. University of Nottingham. Together for mental wellbeing. 30th September 2010.

Schwingel, A., Niti, M., Tang, C. & Ng. T. (2009) Continued work employment and volunteerism and mental wellbeing of older adults: Singapore longitudinal ageing studies. Age and Ageing. 38 (5), 531–537.

ScotCen Social Research (2014), Understanding every day help and support, York: Joseph Rowntree Foundation.

Seyfang, G. (2006) Time Banks in the UK: Building Sustainable Communities, paper prepared for 'Monetary Regionalisation' conference, September 2006, Weimar, Germany.

Shankar, A., Rafnsson, S.B. & Steptoe, A. (2015) Longitudinal associations between social connections and subjective wellbeing in the English Longitudinal Study of Ageing. Psychological Health. 30 (6), 686–698.

Skrabski, A., Kopp, M., Rózsa, S., Réthelyi, J. & Rahe, R.H. (2005) Life meaning: an important correlate of health in the Hungarian population. International Journal of Behavioral Medicine. 12 (2), 78–85.

Smith, V. (2010) Review article: enhancing employability: human, cultural and social capital in an era of turbulent unpredictability. Human Relations. 63 (2), 279–303.

Spera, C., Ghertner, R., Nerino, A., DiTommaso, A. (2015) Out of work? Volunteers have higher odds of getting back to work. Nonprofit and Voluntary Sector Quarterly. 44 (5), 886–907.

Stephens, C., Breheny, M. & Mansvelt, J. (2015) Volunteering as reciprocity: beneficial and harmful effects of social policies to encourage participation in older age. Journal of Aging Studies. 33, 22–27.

Tabassum, F., Mohan, J. & Smith, P. (2016) Association of volunteering with mental well-being: a life-course analysis of a national population-based longitudinal study in the UK. BMJ Open. 6 (8): 011327.

Tan, E.J., Xue, Q.L., Li, T., Carlson, M.C. & Fried, L.P. (2006) Volunteering: a physical activity intervention for older adults--The Experience Corps program in Baltimore. Journal of Urban Health. 83 (5), 954–969.

Tan, E.J., Rebok, G.W., Yu, Q., Frangakis, C.E., Carlson, M.C., Wang, T., Ricks, M., Tanner, E.K., McGill, S. & Fried, L.P. (2009) The long-term relationship between high-intensity volunteering and physical activity in older African American women. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 64 (2), 304–311.

Teasdale S (2008). In Good Health. Assessing the impact of volunteering in the NHS. London: Institute for Volunteering Research. Available from: www.volunteering.org.uk/NR/rdonlyres/47F941B1-F3A2-4F4D-971E-9DCCD23408E2/0/in_good_health_final_report. [Accessed 11th November 2016].

Thoit, P.A. & Hewitt, L.N. (2001) Volunteer work and well-being. Journal of Health and Social Behavior. 42 (2), 115–131.

Trickey, R., Kelley-Gillespie, N. & Farley, O. W. (2008) A look at a community coming together to meet the needs of older adults: an evaluation of the Neighbors Helping Neighbors program. Journal of Gerontological Social Work, 50 (3/4), 81–98.

Van Willigen, M. (2000) Differential benefits of volunteering across the life course. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 55 (5), S308–S318.

Varma, V.R., Carlson, M.C., Parisi, J.M., Tanner, E.K., McGill, S., Fried, L.P., Song, L.H. & Gruenewald, T.L. (2015) Experience Corps Baltimore: exploring the stressors and rewards of high-intensity civic engagement. The Gerontologist, 55 (6), 1038–1049.

Varma, V.R., Tan, E.J., Gross, A.L., Harris, G., Romani, W., Fried, L.P., Rebok, G.W., & Carlson, M.C. (2016) Effect of community volunteering on physical activity: a randomized controlled trial. American Journal of Preventative Medicine, 50 (1), 106–110.

Von Bonsdorff, M.B. & Rantanen, T. (2011) Benefits of formal voluntary work among older people. A review. Aging Clinical and Experimental Research, 23 (3), 162–169.

Warburton, J. & McLaughlin, D. (2005) Lots of little kindnesses: valuing the role of older Australians as informal volunteers in the community. Ageing and Society, 25 (5), 715–730.

Wilson, J. & Musick, M. (2000) The effects of volunteering on the volunteer. Law and Contemporary Problems, 62 (4), 141–168.

Windle, K. (2015) What role can local and national supportive services play in supporting independent and healthy living in individuals 65 and over? Foresight Report. London: Government Office for Science.

Yang, Y.C., Li, T. & Ji, Y. (2013) Impact of social integration on metabolic functions: evidence from a nationally representative longitudinal study of US older adults. BMC Public Health, 13, 1210.

What can you do to help?

Practitioners and people who make decisions tell us that not enough is being done to respond to the ageing population. There's a lot you can do with us to change this:



DEEPEN YOUR UNDERSTANDING

Share and apply insight and evidence of what people in later life want and what works in practice



MAKE A COMMITMENT

Prioritise ageing in your organisation – grasp the opportunities as well as tackle the challenges of demographic change



TAKE ACTION

Create change by trying out new approaches in partnership with us

We need to act now to improve later lives today and for future generations. Join us in making that change.

- ** www.ageing-better.org.uk
- **▼** @Ageing_Better

This report is available at www.ageing-better.org.uk | For more info email info@ageing-better.org.uk The Centre for Ageing Better received £50 million from the Big Lottery Fund in January 2015 in the form of an endowment to enable it to identify what works in the ageing sector by bridging the gap between research, evidence and practice.