Social activity as a means to increase physical activity: Under-researched topics in older adult health promotion

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It is widely known and recognised that staying physically active throughout life brings health benefits, and that this is especially so in older age. This article examines existing research into whether being socially active is one way to increase physical activity. It highlights evidence that adults who are not lonely (in urban areas) report higher levels of physical activity (Pearsson and White, 2012) and “having someone to turn too” is also related to being more active (McMurdo et al., 2012).

We currently know quite a lot about what influences older adults living in cities in the UK to be, or not to be, physically active (Fox et al., 2011; McMurdo et al., 2012). However, such knowledge is not as extensive for rural areas, even though it is in these areas that the greatest proportion of adults over the age of 65 live. Rural areas also have the greatest predicted growth of this population group (ONS, 2012). This is a significant gap in the research into social activity, loneliness and health.

This article also engages in current debate around whether loneliness or isolation or both have a negative impact on physical health. It observes that studies that use a broad definition of social isolation to include social participation (e.g. Steptoe et al., 2013) have found that isolation has a greater impact on cardiovascular disease risk factors and mortality. However, longitudinal studies in
other European countries that define social isolation only in relation to the number of supportive contacts (not participation) found that social isolation was not related to mortality. Pinpointing which of these definitions is most influential on health, and who is most likely to experience them, is important as services or policy makers might not take action due to the contradictory evidence.

It concludes that studies exploring the differences and relationships between loneliness, social isolation and social participation in a rural setting are necessary if we are to better understand their predominance and connection to levels of physical activity.

A full version of this article can be downloaded here.

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News from the Research Hub

‘Loneliness – the State We’re In’ Roundtable (11 September 2013)

Over 70 delegates joined the Research Hub in September to debate the gaps and controversies that need more attention in loneliness research, practice and policy. A short summary report from the roundtable at the British Society of Gerontology conference is now available online.

Presentations were given by five Hub members, including:

- Christina Victor - Is loneliness really bad for older people?
- Mima Cattan - Loneliness interventions – are we barking up the wrong tree?
- Barbara Hanratty - Can tackling loneliness reduce health and social service use?
- Danielle Moore - Is loneliness a risk factor for admission to care homes?
- Stefanie Doebler - Loneliness, isolation, and the bridging social capital, of elderly Europeans

Discussions following the presentations ranged widely, with speakers raising a number of interesting ideas, including that:

- To only consider the impact of social relationships may not be adequate - a new theory of loneliness could consider the particular impact of disability, loss or bereavement
- We know that 90% of the older population are not chronically lonely, so how can we learn why that is – and what’s protecting them from loneliness?
- After 60 years of academic research, we have not got particularly far in our attempts to prevent loneliness. It may be time to get more action research into loneliness in older age funded and work closer with existing services for older people

You can read more about these presentations and discussions here.
Loneliness and social isolation among older people – research perspectives on experienced loneliness and social isolation (23-24 September 2013)

In September, the National Institute for the Study of Ageing and Later Life (NISAL) at Linköping University hosted Loneliness and social isolation among older people – research perspectives on experienced loneliness and social isolation in Norrköping, Sweden.

Anna Goodman from the Campaign spoke alongside Professors Mima Cattan and Christina Victor from the Research Hub. We were joined by researchers from a range of disciplines from across Europe, including Sweden, Germany, the Netherlands and Spain. The Campaign’s presentation slides can be downloaded from here.

NISAL used the conference to launch a new ‘Knowledge Centre’ on loneliness and isolation. More information about this centre and the conference will soon be available on their website.

Research Hub Meeting - Minutes

Minutes from the second Research Hub meeting of 2013 are now available online. These include notes from project presentations made by members from UCL, Brunel University and Age UK. The next Research Hub meeting will be held in early 2014 in Bristol. More information will be available shortly.

New research into loneliness and social isolation

Norrköping Presentation: ‘Loneliness after Divorce: a Cohort Comparison among Dutch Older Adults’ Dr Theo van Tilburg, Faculty of Social Sciences, Vrije Universiteit Amsterdam

At the recent research conference in Sweden (mentioned above), Dr van Tilburg presented on the changing relationship between divorce and loneliness: his recent research found that divorcees are less socially lonely in 2009 than in 1992. Emotional loneliness also decreases if the respondent was divorced but now had a “supportive partner”. (Social loneliness is experienced when we lack a wider network of friends and acquaintances. Emotional loneliness is felt when we lack one key relationship or friend.)

Previous studies have shown that divorce increases the risk of loneliness, but as society changes divorce is increasingly becoming a more normal life event. This study used data from two sets of older adults, one interviewed in 1992 and the other in 2009. Marriage or partnerships have not become less attractive but the social position of divorcees has improved and this may have had a positive impact on loneliness.

Norrköping Presentation: ‘How does loneliness influence health? Affect is a mediator.’ Dr Oliver Huxhold, German Centre of Gerontology

Dr Huxhold presented on his recent research into the influence of social relationships on physical health and mortality. Preliminary results from the study suggest that loneliness and health can both
influence each other. Loneliness was found to be connected to a higher amount of physical illness symptoms as people age but a worse physical ill health would also predict higher levels of loneliness.

He used longitudinal data from the German Aging Survey to test whether loneliness could predict poor physical health, and whether this was influenced by other positive or negative emotions. The German Aging Survey collected data over 16 years, from adults aged 40 to 85. Loneliness was measured using the De Jong Gierveld loneliness scale.

**Norrköping Presentation: ‘Correlates and predictors of loneliness in old age: evidence from Sweden and England’ Dr Lena Dahlberg, School of Health and Social Studies, Darlana University**

Dr Dahlberg presented on two recent studies that identify factors associated with loneliness: the first was based on longitudinal data from 613 older adults in Sweden. The second used information from 1,255 older adults interviewed for the Barnsley Social Exclusion in Old Age Study, in England.

The Swedish study found that older people moved in and out of loneliness over time (7 years), but there was a general increase in loneliness as they aged. The English study identified different risk factors for social loneliness and emotional loneliness, which supports the argument that social and emotional loneliness should be treated as separate concepts and experiences. The studies also identified different risk factors for men and women. For example, both men and women were at risk of loneliness if recently widowed but low education was a more significant risk factor for men and mobility for women.

The main points from studies were:

- Longitudinal research (research conducted over a number of years) is needed to determine risk factors for loneliness
- Men and women are vulnerable to different risk factors, and could be considered separately
- We should look at emotional loneliness and social loneliness separately

The latter two points are particularly important for organisations or groups thinking of developing services and support for older people at risk of loneliness. The two studies have been submitted for publication.

**Multiple social ties and healthy eating in older people: Findings from the EPIC-Norfolk study (Centre for Diet and Activity Research)**

Researchers from the Centre for Diet and Activity Research (CEDAR) looked at data from nearly 15,000 adults aged over 50. They found that:

- Being single or widowed decreased the daily variety of fruit and vegetables eaten (compared to those who were married or living with a partner)
- Single, separated and widowed men ate fewer different vegetables than women in similar circumstances
- Both living alone and having less frequent contact with friends increased the effect of widowhood by reducing the variety of vegetables an individual ate
- People who lived alone and had infrequent contact with friends ate fewer vegetables each day
Nutrition plays a key role in healthy ageing. In the UK, it is estimated that around 70,000 avoidable deaths are caused by diets that do not match current guidelines. This new research has a number of implications for policy and practice. These include:

- Interventions that increase various types of social relationships could support older adults to eat a healthy diet – these could include social activities or making sure accommodation supporters interact.
- We need to target our healthy eating interventions – for example, around the time of widowhood any assessment of healthy eating needs should consider gender, living arrangements and contact with friends.


[Open Access] Full paper: Conklin et al. (2013) ‘Social relationships and healthful dietary behaviour: Evidence from over-50s in the EPIC cohort, UK’ Social Science & Medicine [http://dx.doi.org/10.1016/j.socscimed.2013.08.018](http://dx.doi.org/10.1016/j.socscimed.2013.08.018)


Researchers in the Netherlands have been working on a scale that can measure the early results of loneliness interventions. Measuring short-term outcomes can make sure we know how, or whether, an intervention works in reducing loneliness in older age. This could also help make changes in the early stages of service or project development.

The researchers developed this scale for the evaluation of Dutch project called Healthy Ageing (more information below). It attempts to identify progress on two broad aims:

a) older people become or stay socially engaged

b) older people search for social support

A broad definition of social support was used and included: learning how to cope with feelings of loneliness; emotional support to enhance self-esteem; transport services that support mobility; and financial support.

The researchers pilot their predictive questions with 303 older people who were also surveyed using the De Jong Gierveld loneliness scale. The answers to these two scales were cross-referenced and broad four themes were found to predict loneliness. Questions in the scale therefore cover:

- **Self-efficacy** – whether the person believes in their ability to complete tasks/ reach goals relating to social activity or friendships
- **Perceived social support** – whether the person believes they have assistance from others (this can encourage participation in social activities or searching for professional help)
Subjective norm – whether the opinions of family, neighbours and friends are encouraging or discouraging a person to stay/become socially active

Motivation – whether the person is willing to search for support, and aware of existing help

The items in this survey were only loosely translated from Dutch to English, and a more precise translation would be required for use in practice.


This research evaluated the impact of *Healthy Ageing*: a local project in Epe (a rural region of the Netherlands) which is jointly run by mental health services, community health services, older peoples’ organisations and the municipality. The *Healthy Ageing* intervention had five components:

- A mass media campaign to raise awareness of loneliness
- Information meetings for interested older people
- Psychosocial group courses for people with mental health problems or chronic diseases
- ‘Neighbours Connected’ project which supports older people to organise or join activities
- Training intermediaries (e.g. nurses and volunteers) to recognise loneliness symptoms

The intervention group scored significantly better than the control group on the loneliness literacy subscale (explained in previous study), motivation and perceived social support after two years. But over the two years of the study, these improvements did not lead to changes in actual social support or a reduction in loneliness. The researchers conclude that it will take more time for the impact of the intervention on loneliness to become measurable.

The intervention aimed to reduce loneliness in high-risk groups (including those with mobility problems, low income, or recently widowed) and to create more awareness of loneliness in the general population. The researchers surveyed a control group of 1300+ as well as a similar-sized group offered the *Healthy Ageing* activities. The mean age in both groups was 74 years old.


This study examined whether and how older people started new relationships with neighbours after short and long-distance moves. Using the Longitudinal Aging Study Amsterdam, the research examined 625 ‘movers’ and 1,936 ‘non-movers’ aged between 57–93 years old.
The researchers found that those who moved a short-distance started relationship with neighbours if they did volunteer work. If a long-distance mover settled in a rural area, felt safe in their new neighbourhood or had moved to an area with lower priced homes, they also started new relationships with neighbours.

A regression analysis is a statistical process that shows a relationship between one fixed factor – e.g. number of relationships – and one or more independent factors, e.g. whether someone has moved far or not, or their relationship status.


This report concludes that poverty in inner-city areas is contributing to, and made worse by, social isolation. They found that people on lower incomes often have very small and weak social networks, rarely go out and have few friends (who were in turn were also affected by poverty and isolation). Rising housing rents are also pushing lower and middle-income residents out of Islington, separating families and making it harder for neighbours to mix. Feelings of isolation were made significantly worse by poor mental health. The report contains a number of powerful case studies and quotes:

You just have to cut back don’t you. Not so much socialising, you cut down food and heating and all of that. What can you do? You can’t do much. Paul, early sixties

We see people come in to talk to the front desk to just pass the time of day…I see that as very much part of our role here – to have a frontline situation where we’re welcoming and warm...because the safety nets and structures in their lives are so skinny. An Islington GP

The report is the conclusion of eight months of research into poverty and inequality in Islington and was commissioned by the Cripplegate Foundation, an independent charity that works in the borough. The researchers combined in-depth interviews with residents and professionals in Islington and analysis of a variety of secondary data sets to show how poverty, housing rent and inequality have changed over time. Interviewees were also asked to draw maps of their lives, and describe the places and people they visited on a regular basis.


This study, carried out in Sweden and Finland, aimed to show the link between aspects of social capital (a network of relationships among people) and loneliness among the very old living at home and in institutional settings. Half of those aged 85 years, and all 90- and 95-year-olds and older in urban and rural municipalities in northern Sweden and western Finland were invited to participate in the study between 2005 and 2007.
A sample of 483 participants who completed the study was included in the final research. Loneliness was experienced ‘often or sometimes’ by 55% of those living in institutional settings, and by 45% of those living in their own homes. Loneliness was closely related to living alone, to depression, and to region (in northern Sweden).

[Restricted Access] http://jah.sagepub.com/content/25/6/1013

[ ] Theeke, L. and Mallow, J. (2013) Loneliness and Quality of Life in Chronically Ill Rural Older Adults American Journal of Nursing 113 (9) pp. 28-37

This pilot study, from the USA, was conducted to learn more about the prevalence of loneliness in older adults in rural areas with chronic illness and how it affects their quality of life. A sample of 60 older adults living in Appalachia was interviewed; researchers used the UCLA Loneliness Scale and CASP-12 quality of life scale. Data on the participant’s chronic illness and medication use were also collected through their medical records.

The researchers found that 97% of the participants were experiencing significant loneliness: this is much higher prevalence rate than other studies (particularly whole-population studies) have found. Adults with a mood disorder such as anxiety or depression had the highest loneliness scores, followed by those with lung disease and then those with heart disease. Loneliness was also significantly related to the total number of chronic illnesses a person had, and their use of benzodiazepines (psychoactive drugs).

The paper recommends that nurses in rural parts of America should assess for loneliness using the three-question UCLA Loneliness Scale as part of an assessment of patients with chronic illness. It argues for nurses to also plan interventions that increase the social opportunities for patients with chronic conditions.


In this study, researchers worked to test a hypothesis that loneliness may encourage the development of the pain, depression, and fatigue symptoms over time. They conducted two observational studies and followed participants for between two and four years.

Across both studies, lonelier participants experienced more (and larger increases in) concurrent pain, depression, and fatigue than less lonely participants. This demonstrates that loneliness is a risk factor for the development of the pain, depression, and fatigue symptoms over time. This study also highlights the health risks of loneliness as pain, depression, and fatigue often accompany serious illness and place people at risk for poor health and death.
Study One was a sample of cancer survivors and Study Two was a sample of older adults caring for a spouse with dementia (caregivers). Participants completed annual measures assessing loneliness, pain, depression, and fatigue.


- Shaw Ruddock, J. (2013) *Creating Community Hubs and Reducing Social Isolation amongst Older People in the Second Half of Life Yields a Net Rate of Return of over 135% to the NHS* (London)

This report looks at the potential for Second Half Foundation ‘local hubs’ model to reduce social isolation amongst older people and deliver savings to local and national health services. The report concludes that services based on the model of the Second Half Centre (which is based in Kensington, London) produce returns of over 135% a year to the NHS and local Clinical Commissioning Groups. Based on a Preventative Care Model, the first Second Half Centre was opened on October 29th 2012 and now has an average of over 250 people each week coming through its doors to participate on activities on offer. Drawing on a number of studies showing the links between social isolation and health problems, the report seeks to monetise the benefits of providing community hubs to tackle social isolation for the ageing population.


**Loneliness research in the news**

- **Professor John Caccioppo - ‘The lethality of loneliness’ - TEDxDesMoines**

Professor John Caccioppo, from the University of Chicago, gives a succinct summary of his research into loneliness and its impact on our behaviour and mental and physical health. This talk is a good introduction into a growing body of research into loneliness in the USA.

The TEDx program is designed to promote “ideas worth spreading” and give communities, organisations and individuals the opportunity to stimulate dialogue in their local area around interesting ideas or research.

Full video: http://www.youtube.com/watch?v=_0hxl03JoA0

- **Dr Anna Phillips – ‘Having friends helps with stress’ – The Guardian 08.09.13**

Dr Anna Phillips, from the University of Birmingham, was interviewed for The Guardian’s ‘How to live longer – the experts’ guide to ageing’. She describes her research into how stressful events in older age (including bereavement or long-term caregiving) have a negative effect on our immune system and recovery from physical injury. In one study, she found that people who were unhappily married had a lower response to flu vaccine than those who were happily married.

To live longer, she recommends, we all “mobilise your social support networks” in periods when we are very vulnerable. Anna explains this will “make you feel a bit better and will also have an impact on your physical function such as your immunity.”
Office for National Statistics – ‘Elderly opt to live together outside marriage’ – The Telegraph 07.09.13

Data from the 2011 census has shown that the proportion of people at retirement age living in their own home has dropped from 34% to 31% in the last decade. More than a quarter of a million people over the age of 65 in England and Wales are living unmarried with a partner – double the number recorded a decade earlier, according to the Office for National Statistics.

Vicki McLynn, a partner in the family law at Pannone Solicitors, told The Telegraph: "Given also that cohabitation is no longer regarded as almost the taboo that it once was, those of pension age feel able to enter new relationships without any kind of compulsion to marry again. In previous generations, individuals might have remained in unhappy marriages because of the social stigma of getting divorced, whereas it is now much more acceptable."

Contribute to the Research Hub

If you would like to contribute to the next Research Bulletin please contact Anna Goodman (anna@campaigntoendloneliness.org.uk). We welcome any research into loneliness or isolation in older age, published or unpublished, including academic journals, new reports, articles, local evaluations and case studies.

About the Campaign to End Loneliness

The Campaign to End Loneliness is a network of national, regional and local organisations and individuals that work through community action, sharing good practice, engaging in policy and research to combat loneliness in older age in the UK. The Campaign is led by 5 partners: Age UK Oxfordshire, Independent Age, Manchester City Council, Royal Voluntary Service and Sense.

The Campaign to End Loneliness has over 1,100 supporters across the United Kingdom. To find out more about becoming a supporter and the work of the Campaign, visit our website: www.campaigntoendloneliness.org.uk