Promoting mental wellbeing, tackling loneliness: a review of the effectiveness of actions delivered outside of the health sector

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Objectives

- To review empirical studies on effectiveness of interventions to improve/protect the mental wellbeing and/or independence of older people (including retired people over 55).

- Excludes interventions for people with diagnosed health problems, including dementia/mental disorders & substantial health & social care needs.

- Excludes one to one interactions with health and social care professionals.

- Focused on positive mental wellbeing outcomes, measures of social participation.

- Examples today taken from review prepared to inform development of NICE guidance on promoting mental wellbeing & independence for older people.
Search Process

- English language material published since 2013
- Wide range of databases, citation tracking, snowballing
- 18,513 records screened
- 424 examined in full text
- 86 studies included
Many different types of action

- Social Activities: Arts & Culture Participation
- Self Management: Bibliotherapy
- Support for older carers
- Intergenerational Activities
- Communication, Support & Friendship
- Computer / Internet Training
- Volunteering
- Lifelong Learning
- Social Gatherings / Sports Activities
- Mentoring / Signposting
Overview

• 9 studies from the UK; 2 from Republic of Ireland

• Interventions and activities discussed are feasible to implement in a UK context.

• Many different countries around the world; US studies dominate

• Only 17 of the studies used randomised controlled study designs, limiting the internal validity of the evidence base.

• Most studies have relatively small populations; few appear to have powered their studies to detect significant effects:

• 55 studies have total populations that are less than 100 and 33 have total populations that are under 50.
Women as a % of study population

Data from each of 76 studies where gender reported

Reported Mean Age of Study Populations

Data from 82 studies
Arts & Culture Based Activities
## Art related interventions

<table>
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<tr>
<th>Study</th>
<th>Design</th>
<th>Sample size</th>
<th>Intervention content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coulton ++, 2015, UK</td>
<td>RCT</td>
<td>131 (intervention), 127 (control); 84% women, mean age 69</td>
<td>14 week community group singing programme for people over the age of 60</td>
</tr>
<tr>
<td>Cohen + (2006) USA</td>
<td>Quasi-experimental study</td>
<td>90 (intervention) 76 (controls)</td>
<td>Participation in a professionally led choral singing group</td>
</tr>
<tr>
<td>De Medeiros, ++, 2011, USA</td>
<td>RCT</td>
<td>18 (writing workshop) 18 (oral reminiscence) 15 (no intervention)</td>
<td>Autobiographical writing workshop and oral reminiscence</td>
</tr>
<tr>
<td>Hallam, +, 2014, UK</td>
<td>Quasi-experimental study</td>
<td>398 (intervention) 102 (Comparison groups)</td>
<td>Various forms of musical activities and non-musical activities e.g. yoga, language classes, social activities</td>
</tr>
<tr>
<td>Haslam, -, 2014, Canada</td>
<td>RCT</td>
<td>40 across three intervention groups</td>
<td>Singing secular songs, story reminiscence, singing religious songs</td>
</tr>
<tr>
<td>Lee, ++, 2010, Hong Kong</td>
<td>RCT</td>
<td>31 (intervention) 35 (control)</td>
<td>MP3 Music listening programme</td>
</tr>
<tr>
<td>Seinfeld, +, 2013, Spain</td>
<td>Quasi-experimental study</td>
<td>13 (intervention) 16 (control)</td>
<td>Weekly piano lessons for older people</td>
</tr>
<tr>
<td>Sole, -, 2010, Spain</td>
<td>Before and after with controls</td>
<td>52 (Choir) 19 (Music Appreciation) 19 (Preventive Music Therapy)</td>
<td>Choir, music appreciation class and preventive music therapy</td>
</tr>
<tr>
<td>Travers, -, 2011, Australia</td>
<td>Uncontrolled before and after study</td>
<td>154 (intervention)</td>
<td>Bygone radio broadcast programming (1920s to 1950s)</td>
</tr>
</tbody>
</table>
Community Group Singing

Effectiveness and cost-effectiveness of community singing on mental health-related quality of life of older people: randomised controlled trial

Simon Coulton, Stephen Clift, Ann Skingley and John Rodriguez

Background
As the population ages, older people account for a greater proportion of the health and social care budget. Whereas some research has been conducted on the use of music therapy for specific clinical populations, little rigorous research has been conducted looking at the value of community singing on the mental health-related quality of life of older people.

Aims
To evaluate the effectiveness and cost-effectiveness of community group singing for a population of older people in England.

Method
A pilot pragmatic individual randomised controlled trial comparing group singing with usual activities in those aged 60 years or more.

Results
A total of 258 participants were recruited across five centres in East Kent. At 6 months post-randomisation, significant differences were observed in terms of mental health-related quality of life measured using the SF12 (mean difference = 2.35; 95% CI: 0.06-4.76) in favour of group singing. In addition, the intervention was found to be marginally more cost-effective than usual activities. At 3 months, significant differences were observed for the mental health components of quality of life (mean difference = 4.77; 2.53-7.01), anxiety (mean difference = -1.78; -2.5 to -1.06) and depression (mean difference = -1.52; -2.13 to -0.92).

Conclusions
Community group singing appears to have a significant effect on mental health-related quality of life, anxiety and depression, and it may be a useful intervention to maintain and enhance the mental health of older people.

Declaration of interest
S.C. is a board member of Sing For Your Life Ltd, a not-for-profit third sector organisation which played a role in developing and implementing the intervention reported.

Brit Journal of Psychiatry Coulton et al in press
Silver Song Clubs

- **Coulton in press (++) 'Silver Song Clubs'** 258 older people, 84% women, mean age 69, 5 clubs in East Kent, almost all White British

- 14 weeks of professionally led singing programmes; comparators - usual activities.

- At 6 month follow up significant improvement in SF-12 mental scores; 2.35 mean difference (p<0.05)

- Potentially cost effective - cost per QALY gained £2800 but only 64% chance of being cost effective if £20,000 per QALY gained
Golden Oldies

Registered Charity
Lottery Funded
Operating in south west England and Wales
Group singing and other activity events
Only one local authority has consistently funded
Almost 100 local groups now in existence

Goldies who attended a BIG SING at Wirthlington School near Bath in 2012
Building Friendships
# Study overview: Building friendships

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<tr>
<th>Study</th>
<th>Design</th>
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<tbody>
<tr>
<td>Butler - (2006) US</td>
<td>Uncontrolled exploratory study</td>
<td>66 (intervention)</td>
<td>Senior Companion Programme (SCP), <strong>providing social support and assistance</strong> to frail community-dwelling older adults</td>
</tr>
<tr>
<td>Lawlor ++ (2014) Ireland</td>
<td>RCT</td>
<td>49 (intervention), 51 (control); 75% women, Median age 80</td>
<td>Brief <strong>volunteer peer visiting programme</strong> for community dwelling older people</td>
</tr>
<tr>
<td>Martina + (2006) The Netherlands</td>
<td>Quasi-experimental study</td>
<td>69 (intervention) 60 (control)</td>
<td><strong>A friendship enrichment programme</strong>, focusing on empowering the older participants to develop and maintain friendships by training social abilities</td>
</tr>
<tr>
<td>Martina + (2012) The Netherlands</td>
<td>Quasi-experimental study</td>
<td>69 (intervention) 60 (control)</td>
<td><strong>A friendship enrichment programme</strong>, focusing on empowering the older participants to develop and maintain friendships by training social abilities</td>
</tr>
<tr>
<td>Pope - (2013) US</td>
<td>Uncontrolled before and after study</td>
<td>142 (intervention)</td>
<td><strong>A church-based spiritual health promotion programme</strong> bringing together representatives of different church congregations</td>
</tr>
<tr>
<td>Stevens + (2006) The Netherlands</td>
<td>Quasi-experimental study</td>
<td>Study 1: 72 (intervention) Study 2: 69 (intervention) 55 (control)</td>
<td><strong>A friendship enrichment programme</strong>, focusing on empowering the older participants to develop and maintain friendships by training social abilities</td>
</tr>
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</table>
Evaluation of Only The Lonely

- Lawlor 2014 (++) ‘Only the Lonely’ 30 peer volunteer visiting programme in rural and urban areas in 3 counties in Ireland for 100 older mean, median age 80, 49 intervention, 51 control.

- Volunteers matched with older people - visits at least 1hr per week for 10 weeks; controls - usual care

- 3 month follow up De Jong Gierveld Loneliness Scale scores significantly lower in the intervention group (p=0.003). Differences on social loneliness subscale (p=0.022) and the emotional loneliness subscale (p=0.015). No difference in social network scores. 25 of 49 participants continued to be visited by volunteers after end of trial.

- Also potential reductions in loneliness for older volunteers but no control group.
Intergenerational activities
Intergenerational activities and volunteering

School-based interventions
Interventions with children outside of school
Older people as volunteers
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<th>Study</th>
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<tr>
<td>Cook - (2013) UK</td>
<td>Exploratory uncontrolled before and after study</td>
<td>30 older volunteers, 14 men and 16 women, mean age 74</td>
<td>Volunteers trained to rear and look after chickens, visit older people and schools.</td>
</tr>
<tr>
<td>Kamei - (2011) Japan</td>
<td>Before and after study with controls</td>
<td>14 older people, 8 programme student volunteers and 7 children</td>
<td>Intergenerational day social and activity programme</td>
</tr>
<tr>
<td>Marx + (2005) USA</td>
<td>Non randomised controlled study</td>
<td>38 (intervention) 27 (control)</td>
<td>Intergenerational email pen-pals programme and an intergenerational face-to-face visiting programme</td>
</tr>
<tr>
<td>Morita - (2013) Japan</td>
<td>Exploratory observational study</td>
<td>11 (intervention) 14 (comparision)</td>
<td>Intergenerational programme where older adults participated in singing, dancing and games with preschool children who visited an adult day centre</td>
</tr>
</tbody>
</table>
• **Cook 2013** (--) 'Henpower' 30 older volunteers, (mean age 73.89 ± 13.95) 16 women, 14 men. Gateshead, Big Lottery Silver Dreams Fund

• Trained/supported to establish hen houses in care settings and deliver activities to older people, friends/relatives, care staff/managers and school children.

• Significant improvement on Warwick Edinburgh Mental Wellbeing Scale from baseline to 9 month follow-up 41.0 to 53.0 (p<0.000)

• Non-significant improvement on De Jong Gierveld Loneliness Scale scores from median of 5.0 to 4.0 (p<0.281).

• Limitations: small scale, no comparison group.
Intergenerational Activities

- Intergenerational programme in community involving older adults and children. Using SF-8 at 3 months and 6 months post programme older adults had significantly improved mental health component scores ($F_{[2.26]} = 4.00, p= 0.030$) (Kamei 2011 -)

- Intergenerational programmes involving social activities seem to better support intergenerational conversations than passive activities watching theatre/musical activities. ($p<0.001$) (Morita 2013 -)

- With an intergenerational pen-pal programme after 6 months, 57% of older adults enjoyed the programme; 88% took part in face- to -face visits to pen-pals. 26% would have liked to continue to contact pen-pals (Marx + 2005).

- Positive outcomes for volunteers in US Experience Corp (many studies)
East Dorset: Examples

Includes schools

More than 50 volunteers working with children whose first language is not English

Advice in GP Surgeries

Book Clubs
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<td>Dickens + (2011) UK</td>
<td>Non randomised controlled study</td>
<td>200 (intervention) 195 (control)</td>
<td>Mentoring intervention targeting socially isolated older people, mentors offered the relevant social skills and capabilities for social participation</td>
</tr>
<tr>
<td>Greaves – (2006) UK</td>
<td>Quasi-experimental study</td>
<td>172 (intervention)</td>
<td>Adult volunteers were trained as mentors to work closely with older adults, aiming to engage them in programmes of creative, exercise and/or cultural activities, with an emphasis on social interaction; volunteers could refer older people to their own programmes or other programmes in community</td>
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</table>
Positive mental health and social support seem to improve among older adults supporting peers in their social participation (Greaves 2006 -). Improved positive mental health at 6 months (SF-12) (Mean = 3.02, CI 95%: 1.01 to 5.04, p < 0.005); no significant effect at 12 months; Medical Outcomes Social Support Scale mean scores 1.88(1.11 s.d) to 2.08 (0.99 s.d) p=0.02

But subsequent larger study looking at the same intervention in same location could not evidence any impact on mental wellbeing or social support - with the exception of one measure, ‘getting along with others’ - which declined (Dickens 2011 +)
Dorset Wayfinders

Dorset divided into 33 local areas - 2 Wayfinders; 18 hours per week in total in each local area;

Salaries paid by Dorset Council

Local evaluation: 2049 (33%) of all their complex home visits over the 12 months to May 2013 were made to address and signpost people to social integration activities while another 1,117 contacts (18%) were to address good health and mind.

Extrapolated - 11,373 contacts of all types to address social integration if the share of complex cases were to be repeated for all contacts.

If 82 contacts led to one case of GP consultation and cognitive behavioural therapy for depression avoided then the scheme would be cost saving.

Photo: Wayfinder gives advice at a local launch event

Provide information and signposting services to all over 50

Based in various settings including GP practices, libraries, shopping centres and provide home visits for more complex cases.
Hennessey-Ford K, Howard A, McKay V (2014) op cit
Third Age education
Face to face education

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<tbody>
<tr>
<td><strong>Arkoff – 2004, USA</strong></td>
<td>Before and after study with comparison group</td>
<td>Intervention: 18 women</td>
<td>Life review programme delivered at Academy of Lifelong Learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Comparison: 18 women</td>
<td></td>
</tr>
<tr>
<td><strong>Fernandez-Ballesteros – (2012), Spain</strong></td>
<td>Quasi- experimental study with control group</td>
<td>56 intervention group</td>
<td>3 year university programme for older adults</td>
</tr>
<tr>
<td></td>
<td></td>
<td>39 control group</td>
<td></td>
</tr>
<tr>
<td><strong>Fernandez-Ballesteros – (2013), Spain, Chile, Mexico, Cuba</strong></td>
<td>Quasi- experimental study with control group</td>
<td>250 intervention group</td>
<td>3 year university programme for older adults</td>
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<tr>
<td></td>
<td></td>
<td>65 in control group</td>
<td></td>
</tr>
<tr>
<td><strong>Orte – (2007), Spain</strong></td>
<td>Uncontrolled before and after study</td>
<td>186 (intervention)</td>
<td>A community-based open university programme targeting older adults</td>
</tr>
<tr>
<td><strong>Portero – (2007), Spain</strong></td>
<td>Uncontrolled before and after study</td>
<td>163 (intervention)</td>
<td>A Third Age University Programme</td>
</tr>
</tbody>
</table>
Third Age Education

- Participation in 3 year education programme in Spain associated with non significant improvements in positive affect and no worsening of negative affect compared to controls (Fernandez-Ballesteros 2012 -). Same intervention assessed across four countries reported negative affect significantly reduced ($t =5.17$, $p < .01$) (Fernandez-Ballesteros 2013 -).

- Other evaluations of participation in university-level studies show increased psychological wellbeing using the Scale of Wellbeing (3.6 s.d. +/- 0.4 to 3.9 s.d. +/- 0.4, p<0.000) as well as increased number of new social contacts measured using The Social Support Questionnaire (mean 31.1 s.d. +/-2.2 to mean 32.7 s.d. +/-2.4, p=0.000) (Portero 2007 -).

- Evaluation of participation in an Open University for Older People’s programme in the Balearic Islands, found an increased number of new relationships ($p<0.001$ - no values reported) (Orte 2007 -)

- In a small study participation in a 14 week Life Review programme for students an Academy of Life Long Learning compared to controls who did not do Life Review - significant improvements in all sub-scales of the 84-item Scales of Psychological Wellbeing (at least $p<0.05$) (Arkoff 2004 - )
University of the Third Age

• “retired and semi-retired people come together and learn together, not for qualifications but for its own reward: the sheer joy of discovery! Members share their skills and life experiences: the learners teach and the teachers learn, and there is no distinction between them.”

• In all case study areas; in April 2014 925 U3As with 321,966 members; Sheffield has more than 3,000 members

• Self funded, nominal - total member income in 2013/2014 was £1,117,878 or less than £4 per member. Third Age Trust covers liability insurance costs of up to £5 million

• Not able to find formal effectiveness evaluation in literature in UK only of similar models outside UK
Case Study Overview

171 organisations and community groups in five areas identified delivering at least 320 different activities

Mainly delivered by registered charities and social enterprises

Focus in most areas on tackling social isolation and loneliness - much less focus on mental wellbeing

But just a snapshot – doesn’t pick up on all services and those targeted at general population – e.g. different volunteering opportunities.

 Doesn’t focus on interventions out of scope
Challenges: Funding and sustainability

Mixture of funding sources: charitable grants, lottery support, user charges

Funding from local authorities less prominent outside East Dorset and Cotswold - CCGs peripheral

Although some long standing organisations and church involvement, funding appears largely time-limited and short term

Modest scale and feasible to self-fund many activities through inputs of volunteers and small fees e.g. University of Third Age
Challenges: What do we know about effectiveness?

Very few of local services identified subject to formal qualitative or quantitative evaluation.

Exceptions include the Gloucestershire Village Agents programme - where local university commissioned to evaluate

Also evaluations built into some national initiatives/ big lottery funded etc

Mainly basic monitoring / process data collected e.g. on number of service contacts
Concluding remarks

• There is an evidence base (albeit mainly small scale studies) on the positive effects of actions to promote on mental wellbeing among older adults

• Opportunities for investment in many different types of actions outside of health care sector

• Group based participatory activities of all sorts; volunteering and intergenerational actions also key

• But are interventions attractive to all? Do they engage all; Many potential barriers to participation

• Often can be low cost, but challenges in sustainability

• Emerging literature re evaluation of digital inclusion initiatives