



Successful Ageing and Social Interaction – A Policy Brief

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The Policy Challenge

The UK population is ageing. Indeed, it is the population of 'older old' people which is now the fastest growing section of the population in Britain and most other European countries. By 2050 it is highly probable that those aged 80 and over will constitute at least one in ten of the population in all the largest European countries, including Britain, France, Germany, Italy, and Spain.

Most older people do not suffer from serious levels of disability and lead fulfilled and active lives which involve high levels of interaction with family and friends. Among the older old, however, risks of disabling disease are much higher, as are the chances of having been widowed (especially for women) and having suffered other bereavements. Material deprivation is also more common among the older old than people in their 60s and early 70s. Given increases in the relative and absolute numbers of very old people, it is critical for policymakers to understand what factors are associated with 'ageing well' in the older old, including those with disabilities, in order that public policy and resources can be targeted at enhancing successful ageing within this age group.

This paper summarises new research into what factors are associated with 'ageing well' among the oldest old, and discusses the findings in the context of current UK policy.

Background

Limitations in one aspect of an older person's life may quickly affect other dimensions. For example, reduced mobility may have a negative influence on a person's mental health. As a result, it is important to consider 'successful ageing' as a process with multiple components. In the growing literature on the topic, models used to evaluate successful ageing have reflected this, and have typically invoked several domains in explaining how people age well.

For example, Rowe and Kahn's (1987) model of successful ageing includes three components: avoidance of disease, maintenance of cognitive capacity and active engagement with life. Only people with high levels of function in all these domains are considered to be ageing 'successfully' and this group includes very few 'older old'.

An alternative model put forward by Baltes and Baltes (1990) is 'selective optimisation with compensation'. This model recognises that an individual's experience of ageing is subjective and unique, and that individuals can remain mentally strong while physically frail and can adapt to limitations they experience as a result of ageing. For example, individuals can prioritise things important to them and use strengths in one domain and coping strategies to compensate for weaknesses in others. A good illustration of this is the use of lists to compensate for deficits in short-term memory.

Both models, but especially that of Rowe and Kahn, have been used in research studies that have looked at 'successful ageing'. These have generally shown that factors associated with 'successful ageing' include:

- increased physical activity;
- higher self-rated health (i.e., an individual's opinion on their own health);
- increased social contact/activity/support.

To a lesser extent, other factors have been found to be associated with successful ageing:

- fewer chronic illnesses;
- less hearing impairment;

- higher income;
- higher education;
- less cigarette smoking;
- personality;
- less depression;
- age identity;
- ethnicity.

Few of the previous studies in this area have been conducted in the UK or used data from very old people. Given the importance of understanding what factors are associated with ageing well for UK public policy, this research sought to build on previous evidence on 'successful ageing', and to specifically make use of UK data that provide a detailed picture of a large sample of older old people. In particular, the research sought to understand factors associated with a good quality of life among the older old, as the message of many previous studies seems to imply that 'successful ageing' is only possible for younger elderly people.

The Research

The research used data collected as part of a randomised trial of health screening of older people in general practice, called the *MRC Trial of Assessment and Management of Older People in the Community* (Appendix 1).

Successful ageing was defined in a way that allowed for the possibility that people could be physically frail and yet consider themselves to be ageing well, i.e., that individuals may 'compensate' for declines in physical functioning and retain good mental well-being.

To measure successful ageing, our analysis used a well-established measure of health related quality of life (QOL) called the 'Short Form-36 Health Survey' (SF-36; Appendix 2). The SF-36 measures health-related QOL by evaluating various domains of a person's life, including aspects of physical, mental and social functioning, bodily pain, vitality and general health perceptions. The SF-36 produces summary scores for two different components of QOL: physical QOL (SF-36 PCS) and mental QOL (SF-36 MCS). A score of 50 on either physical or mental QOL represents the mean (average) score for people in the general UK population. People who score above 50 are considered to have better than average QOL, whereas those who score under 50 are considered to have poorer than average QOL.

The first stage of the analysis explored whether there was an association between good mental and good physical QOL. This was done to explore whether individuals were able to 'remain positive' despite declining physical health.

The next stage of the analysis identified those factors associated with better mental QOL. This was done by investigating the physical and psychosocial functioning of older people with good mental QOL.

The Findings

Is there an association between good mental QOL and good physical QOL?

The analysis looked at mental QOL (SF-36 MCS) in relation to a number of aspects of physical health status:

- physical QOL (SF-36 PCS);

- other variables related to mobility, self-care and looking after the home (measured by the Sickness Impact Profile, SIP).

As shown in Appendix 3, the analysis found that older people with the “best” mental QOL (quartile 4; average mental QOL score of 62.7, which is 12.7 points above the average for the general UK population) showed physical QOL that was similarly poor (average physical QOL score of 39.9, which is 10.1 points below the average) to those in the “worst” and middle categories of mental QOL.

This suggests that:

- individuals are able to ‘remain positive’ despite declining physical health;
- how we age mentally may not necessarily reflect how we age physically;
- there is some ‘compensation’ between domains, i.e., that whether consciously or subconsciously some people compensate mentally for their poor physical health.

What factors are associated with good mental QOL in older people in the UK?

Social interaction was significantly associated with good mental QOL. The measure of social interaction is described in Appendix 4. This result confirms findings from previous studies of the importance of social interaction for mental QOL. Subsequent longitudinal analyses, comparing changes after 36 months, showed that social interaction contributes to good mental QOL, although the effects were less strong. Longitudinal analyses also suggested that receiving help from a daughter or daughter-in-law is associated with good mental QOL, though the number of children that a person had did not have an effect.

Besides, social interaction, fewer visual difficulties were also found to be associated with good mental QOL.

Other factors associated with good mental QOL, such as problems carrying out self-care activities, provide additional support for the finding that physical and mental QOL are distinct aspects of well-being, and that some degree of compensation can occur in older people with physical problems.

Discussion

The key findings of the research are as follows:

- Good mental QOL is not necessarily dependent on good physical QOL and health status. This could be seen as supporting evidence of the ‘positivity effect’, noted in psychological research, in which among the cognitive changes associated with ageing, older people can enjoy good emotional well-being despite adverse factors, such as physical decline.
- Compensation occurs; older people can experience good mental QOL even if physical QOL is poor.
- Social interaction is associated with good mental QOL among the oldest old.

This research provides several important pointers for policymakers. First, it shows that ‘successful ageing’ is indeed a process with several dimensions, and in particular, that among the oldest old, having poor physical QOL is not necessarily associated with poor mental QOL. Public policy and services that seek to promote ‘ageing well’ amongst the oldest old must recognise this fact.

Second, the research poses questions for the formulation and targeting of health policy toward people in the ‘oldest old’ group. Given the disassociation identified in the research

between mental and physical QOL, what should the target of health policy be? Furthermore, in the context of limited health service budgets and resources, how should resources be targeted among these different outcomes?

To some extent, such questions echo the challenges that have long existed as mental health services have fought for recognition as a vital service alongside traditional primary and secondary health care. This research suggests that if health policy and health services are concerned with 'successful ageing', the reach of health services must go even further than mental health services to target more general mental well-being. Such a policy might also prove cost effective if it resulted in greater overall well-being and lower or later use of long-term care; however, this area requires further research.

Third, if mental well-being is to be a target of health policy, a key factor associated with good mental QOL, social interaction, creates opportunities and questions for policymakers. Improving social interaction among the oldest old is potentially a far less costly challenge than providing health services for improving physical QOL.

Various services and facilities provided by the state can be seen as recognising the importance of social interaction, such as the provision of specialist transport by local authorities and the availability of social facilities in the community. At a national level, a number of the innovative community schemes piloted and evaluated under the Department of Health's Partnerships for Older People's Projects (POPP) specifically encourage social interaction. But, if social interaction is one key to successful ageing, is a major increase in resources required to facilitate this? While superficially the answer may be a clear positive, there are further questions that must be answered:

- What are the barriers to social interaction among the oldest old and how can they be overcome?
- What is the role of the state, voluntary sector and individuals themselves in facilitating social interaction?
- What is the role of public health messages and guidance in communicating the importance of social interaction to older people and their families?
- How should public policy and services to promote social interaction amongst the oldest old be funded, whether from health or social care budgets or local authority discretionary spending?
- How can the effectiveness and value of services to promote social interaction be measured?

Clearly, policymakers and service providers can attempt to facilitate social interaction through the provision of services, for example, by raising awareness among frontline staff. The Government can also fund and encourage schemes which specifically tackle social isolation. Nevertheless, like other aspects of public health, encouraging social interaction is about the behaviour and choices of individuals. This suggests that public health awareness programmes targeted at both the oldest old and their families will remain vitally important, despite the difficulties involved in measuring their effectiveness.

Appendices

Appendix 1: 'MRC Trial of Assessment and Management of Older People in the Community'

The details of the MRC Trial of Assessment and Management of Older People in the Community are as follows:

- GP practices randomised to either minimal or intensive screening (106 practices; 43,219 eligible patients)
- Practices selected to be representative of UK mortality and deprivation
- Eligible patients aged 75+ and not living in nursing homes
- Main trial outcomes were mortality, hospital and nursing home admissions and quality of life (measured in sub sample) of 23 practices; n=10,529
- QOL data collected at baseline, 18 months & 36 months
- Further random sample of QOL practices completed SF-36 (used in this study)
 - n = 2246 included at baseline
 - n = 1819 at 18 months
 - n = 1470 at 36 months

See references for further information on the main trial and outcomes. A full list of publications from the study is available from astrid.fletcher@lshtm.ac.uk

Appendix 2: Short Form-36 Health Survey (SF-36)

The SF-36 is a generic measure of health-related quality of life (QOL) used in many studies. It assesses health status in 8 domains:

- physical functioning
- role functioning-physical
- bodily pain
- general health
- vitality
- social functioning
- role functioning-emotional
- mental health

There are two summary scores for mental (SF-36 MCS) and physical (SF-36 PCS) QOL.

Appendix 3:

This table shows how older people defined as having the "best" and "worst" mental QOL fare in terms of physical health status and social interaction. Although those with the best mental QOL have better physical QOL than those in the worst QOL category, their physical QOL is generally poorer than those in the middle category.

	QUARTILE 1 "worst" mental QOL n = 562; mean (CI)	QUARTILES 2 and 3 combined n = 1123; mean (CI)	QUARTILE 4 "best" mental QOL n = 561; mean (CI)
Mental QOL			
SF-36 MCS	40.6 (39.95-41.32)	55.9 (55.70-56.03)	62.7 (62.49-62.85)

Physical QOL			
SF-36 PCS	36.7 (35.61-37.69)	42.7 (41.96-43.34)	39.9 (38.95-40.85)
SIP home management	40.8 (38.64-42.99)	25.6 (24.31-26.88)	30.0 (27.94-32.04)
SIP body care	19.6 (18.27-20.88)	10.1 (9.39-10.73)	12.0 (10.93-13.05)
SIP mobility	29.8 (28.41-31.17)	19.5 (18.66-20.39)	20.4 (19.14-21.71)
Social interaction			
SIP social interaction	18.9 (17.90-19.89)	11.1 (10.52-11.62)	9.7 (9.03-10.43)

For SF-36 PCS and MCS, higher scores indicate better QOL. For SIP scores, higher scores denote worse QOL.

Appendix 4:

Co-variates derived from variables measured in the trial, for each of the following conceptual domains identified from existing studies:

- physical health
- mental health
- health-related behaviours
- social †
- socio-economic

† One variable in the social domain was social interaction and this was assessed using a standardised measure, the 20-item social interaction sub-scale of the Sickness Impact Profile (SIP). This includes questions about:

- visiting people and being visited
- emotion
- talking/listening with people
- making demands
- being alone/isolated
- contact with family

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