

Quality of life in older age: Psychometric testing of the multidimensional Older People's Quality of Life (OPQOL) questionnaire and the causal model under-pinning it.

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In Brief

Increasing numbers of older people, higher expectations for 'a good life', and demands for health and social care, have led to international interest in the enhancement, and measurement, of quality of life (QoL) in older age. QoL is a subjective concept, yet most measures of QoL are based on 'expert' opinions.

This study aimed to test a new measure of Older People's QoL (OPQOL), which is unique in being derived from the views of older people who responded to an earlier survey, funded by the ESRC Growing Older Programme. Here we report the final testing of the OPQOL, and compare it with two existing measures of QoL in older age: the CASP-19 and WHOQOL-OLD. Further aims included elicitation of perceptions of 'active ageing', and identification of predictors. The study was based on over 1000 respondents to surveys of older people living at home in Britain:

- i) two waves of the Office for National Statistics (ONS) Omnibus Surveys;
 - ii) two waves of the national Ethnibus Surveys;
 - iii) a postal follow-up of ONS Omnibus respondents aged 65+ in 1999–2000; 42 of the follow-up survey respondents were also interviewed in-depth.
- Far more of the ethnically diverse, Ethnibus survey respondents had poor QoL than other respondents.
 - The OPQOL had good reliability and validity in all three surveys.
 - Baseline indicators of QoL were able to predict follow-up OPQOL scores in the QoL Survey follow-up sample.
 - Respondents' perceptions of active ageing were multi-faceted.
 - Despite being more likely to be aged 65<75 than 75+, Ethnibus respondents were far less likely than the other survey respondents to consider themselves as ageing 'very' or 'fairly' actively.

Summary of key findings

The Ethnibus sample of 400 people included Indian Asian (38%), Indian Pakistani (29%), Black Caribbean (22%), and Chinese (11%) people. All of the 287 QoL follow-up survey, and 94% of the 589 ONS Omnibus Survey respondents were White British. Over half of each sample were female; most Ethnibus respondents (92%), as expected from population estimates, were aged 65<75, as were 55% of ONS Omnibus respondents, and 17% of older sample of QoL follow-up survey respondents. The remainder were aged 75+.

Ethnibus respondents had poorer health status, despite being younger: 18% rated their health as 'Poor', compared with 4–5% of other respondents. Ethnibus respondents were also more likely to live in larger households: just 5% reporting that they lived alone, compared with 48–49% of other survey respondents. They had twice as many relatives to help them, but fewer friends to help; and were less likely to report having intimacy in social relationships than other survey respondents.

Quality of life (QoL)

Almost three-quarters (73%) of the Ethnibus sample scored in the worst two OPQOL categories indicating poor QoL, compared with 45% of the older QoL follow-up respondents, and 12% of ONS Omnibus respondents. Chinese people reported better QoL than other ethnic groups.

Ethnibus survey respondents were also more scared of dying, of the way they would die, of being in pain before death, and not being able to control their death, than ONS Survey respondents (WHOQOL-OLD module). Chinese people reported the lowest level of fears.

The OPQOL had good acceptability, internal consistency and construct validity in all samples. Cronbach's alphas all exceeded threshold criteria for acceptability of alpha (0.70+): α : 0.748 (Ethnibus survey), α : 0.876 (ONS Omnibus survey), α : 0.901 (QoL follow-up survey). The CASP-19 and WHOQOL-OLD had good levels of reliability and validity in the British population sample, but did not satisfy criteria for Cronbach's alpha in the ethnically diverse sample.

We tested whether the baseline multidimensional model of QoL which underpinned the OPQOL, could predict OPQOL scores at follow-up in the QoL follow-up sample. The predictor variables included in multiple regression analyses were health and functioning, help, social support and activities, neighbourhood ratings, psychological outlook,

and socio-demographic/economic indicators to control for their effects. This overall model was highly significant, and explained 56% of the variation in respondents' OPQOL scores (Adjusted R^2 : 0.563). It is unusual for such a high proportion of variance to be explained in subjective variables, especially with such an amorphous concept as QoL. This generally supports the multidimensional model of QoL underpinning the OPQOL.

Active ageing

Respondents to each survey defined active ageing (in response to an open-ended question) in terms of physical and mental health, fitness and exercise; psychological factors; social activities and participation; independence, and mobility. In each survey, the most common definition of active ageing was exercising the body to maintain physical health and fitness (17% of Ethnibus, 33% of ONS Omnibus and 26% of QoL follow-up survey members). Just under a third of the ONS Omnibus and QoL follow-up survey respondents actually engaged in physical activity; just under two-thirds of the Ethnibus did so (but they included more sedentary activities and games). Over 80% of each sample reported engaging in three or more social activities in the past month, which was also a commonly mentioned concept of active ageing.

Members of the older QoL follow-up sample were asked how other people could be helped to age actively. The most common response was to be socially engaged (27%); followed by exercise and activity (17%).

Despite their younger ages, 40% of Ethnibus survey members rated themselves as ageing 'very' or 'fairly' actively, compared with the majority of respondents to the ONS Omnibus (85%) and QoL follow-up surveys (78%). Among the Ethnibus sample, more Chinese people (27%) reported more optimum levels of active ageing, compared with 5–9% of Pakistani, Caribbean and Indian people.

Multiple regression modelling, which adjusted for socio-demographic, economic and health variables, showed that the OPQOL, but not the CASP-19 or WHOQOL-OLD, independently predicted variations in 'self-rated active ageing' scores.



The OPQOL and health status were consistent, independent predictors of active ageing in each sample. The strongest model was in the QoL follow-up sample, explaining 55% of the variance in self-rated active ageing ($R^2 : 0.550$).

In order to assess the independent predictive power of significant baseline (1999–2000) and follow-up (2007–8) measures on self-rated active ageing at follow-up, these variables were entered into a multiple regression analysis. Having better QoL, health and functioning at baseline predicted optimum active ageing ratings at follow-up, explaining 54% of the variance in active ageing (Adjusted R^2 : 0.544). When the follow-up variables were entered into the model, the baseline variables no longer retained significance; only follow-up OPQOL, health, functioning, and social participation were significant, explaining almost two-thirds of the variance (Adjusted R^2 : 0.639).

QoL follow-up respondents were asked an open-ended question about how they coped with later life challenges. Their responses are relevant to their resourcefulness for ageing actively. Most (64%) reported that they had methods of coping, most commonly their psychological outlook – acceptance, getting on with life, keeping a sense of humour (23%); keeping socially active (15%); seeking informal help, support and advice (14%); and self-compensating -doing difficult things more slowly; using strategies to aid declining memory; using different techniques for physical activities to avoid pain (11%).

In-depth interviews were conducted with a diverse sample of 42 QoL follow-up survey respondents. Active ageing was perceived by them as multidimensional, including physical, mental, psychological and social factors. Enablers of active ageing were said to include provision of clubs, having help in the home, accessible health care and transport. The expense of transport, and its limited availability, were said to act as barriers to participating in social and physical exercise activities.

There was little awareness of what was available to older people (clubs, opportunities for volunteering or financial support). There was a perception that home visits from GPs and allied health care (e.g. chiropody), were difficult to access. Respondents felt that ageing actively contributed to a better QoL, and many employed strategies of proactive coping and 'selective optimisation and compensation' to deal with the challenges of older age.

Conclusions and policy implications

The OPQOL performed well in national population and ethnically diverse samples of older people, reflecting its multi-dimensionality, the item-generation by older people themselves, and piloting with ethnically diverse focus groups. It is of potential value in the evaluation of interventions which have a multidimensional impact on people.

The study also examined active ageing. A multifaceted approach to defining active ageing was common among older people. The most important predictors of active ageing were having concurrently good QoL, health, physical and social functioning. The qualitative research suggested that access to clubs and services could be facilitated with improved publicity; opportunities for volunteering could be promoted more widely; modification and maintenance of the home could help older people remain independent for longer; and public transport could be more accessible and user-friendly for older people. There could be better targeting of older people through local radio, local newspapers or leafleting. Better access to affordable exercise programmes would also be valuable. As keeping active is related to having good health, removing barriers to maintaining health is important for active ageing. Models of pro-active coping and selection, optimisation and compensation were supported.



About the study

The study was based on three national surveys of older people living at home in Britain:

- i) people aged 65+ responding to two waves of the Ethnibus Surveys, (www.ethnibus.com) in 2008. These are rolling face-to-face quota sample interview surveys with adults aged 16+, living at home, based on a statistically robust sample of ethnic minority populations in Britain; the overall response rate among people aged 65+ was 70% (n=400);
- ii) people aged 65+ responding to two waves of the Office for National Statistics (ONS) Omnibus Surveys (www.statistics.gov.uk) in 2008. These are rolling face-to-face interview surveys with adults aged 16+, living at home, based on a stratified random sample of postcodes across Britain; the overall response rate among people aged 65+ was 61% (n=589);
- iii) a postal follow-up survey in 2007-8 of people living at home in Britain, aged 65+ in 1999-2000, who first responded to four waves of an ONS Omnibus, face-to-face interview survey, based on a stratified random sample of postcodes across Britain; the follow-up response rate was 58% (n=287). A sub-sample of 42 respondents was followed-up in-depth.

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