

Do older and younger people differ in their reported well-being? A national survey of adults in Britain

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Aim To document population perceptions of well-being and predictors of self-assessed well-being.

Methods. National face-to-face interview survey of adults aged ≥ 16 years, conducted by the Office for National Statistics for their Omnibus Survey in Britain (response 58%; 1049 of 1823 eligible).

Results. People aged 65+ years were more likely than younger people to define well-being as being able to continue to do the things they had always done. Most men and women, in all age groups, rated their well-being and mental well-being positively. Self-rated health, mental health symptoms, long-standing illness and social support were the main drivers of overall well-being in all age groups. Mental health symptoms, long-standing illness and social support were the main drivers of mental well-being. For example, in reduced multivariable models, those who reported no long-standing illness had almost twice the odds of others, of good, rather than not good, overall well-being, and over three times the odds of good, rather than not good, mental well-being. The odds of good versus not good overall well-being were also multiplied by 1.002 for each additional available person for comfort and support and similarly by 1.073 in relation to mental well-being.

Conclusions. Understanding the drivers of well-being among adults, including older adults, is of high policy importance. Attention should be focused on improvements in population health and functioning and on encouraging younger and older people to develop and maintain social support networks and engagement in social activities.

Keywords. Ageing, health, social support, survey, well-being.

Introduction

Positive perspectives in psychology view old age as a period of opportunity and well-being, with retention or potential development, of the psychological resources to cope with life's challenges.¹ It has been suggested that one of the ways of achieving greater well-being is adoption of psychological strategies, including promoting self-mastery and control and self-enhancing downward, not upward, comparisons with others.² This coincides with worldwide public health interest in the promotion of well-being in older age and the compression of morbidity into fewer years of later life, driven by concerns about increasing health and social care expenditure in ageing societies. This is also reminiscent of the World Health Organization's 1948

definition of health >50 years ago, which emphasized total mental, physical and social well-being.³

Well-being is a dynamic multifaceted concept. Subjective well-being consists of people's own assessments of their overall lives, past and present, either cognitive (e.g. satisfaction) or affective (e.g. feelings of joy, pleasure, happiness),^{4–6} reflecting the influence of early Greek and 19th century utilitarian philosophy, with its focus on hedonism. Objective indicators (e.g. income) are generally, albeit weakly, associated with self-ratings of well-being and related indicators, including overall happiness, life satisfaction and quality of life (QoL).^{7–10} It has been argued, however, that once a certain level of human need has been met and a certain level of wealth has been achieved in society, material wealth contributes little to happiness.¹¹

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Although there is a current awareness that well-being has no clearly defined opposite, and it is more than the absence of 'ill-being', there are no agreed definitions, other than that it is a 'good thing', and much conceptual confusion.^{12,13} An agreed definition is needed; otherwise, its effective precursors will remain unidentified. But agreed by whom? Most existing models are discipline and culture specific. Rarely do definitions reach across disciplines and rarely are lay-people consulted about their views. The consequence is likely to be that any policy actions to improve well-being will be weakened by their lack of relevance to lay people. While lay perceptions of successful ageing, active ageing and QoL have been reported,^{14–16} there are few reports of lay definitions of well-being. One qualitative study¹⁷ reported that older men and women both identified family, health, activities, friendship, philosophy and jobs (in this order) were the most important to psychological well-being. While men were more likely than women to report that they would not change anything in their lives, women reported their desire to have had more friends and family.

Public health policy has focused mainly on promoting physical activity to maintain mental and physical functioning¹⁸ rather than on a multifaceted concept, which includes complex subjective, social and psychological dimensions. There are exceptions to reductionist views.^{19,20} NHS Scotland (2006)²⁰ defined mental well-being in terms of wider well-being and as encompassing subjective feelings of life satisfaction, optimism, self-esteem, mastery and feeling in control, having a purpose in life, a sense of belonging and support. This is consistent with the long US tradition of social indicators research on general well-being.²¹ Promoting positive mental well-being is regarded as crucial in achieving a healthier nation, enabling older people to remain living in their own homes (www.communitycare.co.uk/.../Poppys-and-prevention-for-elderly-people.htm; website accessed 05 September 2010) and having benefits to society. It is a current priority at national and local government levels (www.communities.gov.uk/localgovernment/.../wellbeingpower; website accessed 05 September 2010) and for health and social care commissioners.

Research is inconsistent on age–sex variations with life satisfaction, probably due to differing samples and measures used. Some have reported greater self-assessed well-being among younger, than older, people,²² although older men have also been found to have worse well-being than older women.²³ A U-shaped relationship of well-being with age has been reported from survey research in the USA: from ages 50 to 85, people felt progressively better, with 85-year-olds reporting a greater sense of well-being than the 18-year-olds.²⁴ Gender differences with well-being have been reported; marital status, health status and

depression being predictive for well-being among men aged 60+ years, and self-rated health and depression only were predictive for women.²⁵ Social contact and support have also been significant predictors.^{26,27} While promoting well-being is an issue for all ages, it is also pertinent in older age, given that there are more people aged in their 70s and 80s, and with increased life expectancy, than ever before. There is a policy concern about the potential costs of a more disabled population for public sector services and emphasis on the benefits of facilitating people to remain living in their own homes.

QoL is often regarded as an outcome indicator of well-being. Over three-quarters of people aged ≥ 65 years nationally report having a good QoL.²⁸ However, for the remainder, negative influences on well-being, and thereby QoL, have been reported to include loneliness, low levels of social support and neighbourliness, poor physical functioning, poverty and lack of psychological resources.^{28–32} With older age, major life challenges are increasingly likely to occur, including declining health and functioning, with adverse effects on independence and social participation, social network losses due to illness and death of relatives, friends and neighbours and frailty or vulnerability to adverse outcomes.³³ Each has potentially adverse repercussions for well-being. As Age Concern England and Help the Aged (2009)³⁴ pointed out, these factors can blight the lives of millions of older people. Earlier research among ~ 3000 people aged 65+ and 85+ years living at home reported that there were few improvements in psychological or physical well-being over 2.5 years of follow-up.^{35–39} Older people with higher levels of emotional, social and psychological well-being make less use of health and social services as, given their higher levels of self-esteem, they are more able to cope with problems in their daily lives, optimize opportunities and to have more active lifestyles.²⁸ However, the influencing role of social support in promoting mental well-being is inconsistent.^{28,39} There is some evidence that also suggests that physical activity can prevent some aspects of mental illness in older people, such as depression, dementia and Alzheimer's disease.^{40,41} The study presented here aims to document population perceptions of well-being and predictors of self-assessed well-being.

Methods

The data were derived from a national interview survey of adults aged ≥ 16 years, conducted by the Office for National Statistics (ONS) for their Omnibus Survey in Britain. The Omnibus Survey is conducted monthly and enables independent researchers (alongside government departments) to include a small

number of questions in distinct topic modules. Although the questions were necessarily limited in number, inhibiting inclusion of a wider range of theoretically relevant variables and their measurement scales, the Omnibus Survey provides a valuable opportunity to reach a national random sample of adults.

The sampling frame used for the Omnibus Survey was the British postcode address file of 'small users'. This file includes all private household addresses. A new sample of 67 postal sectors is selected each month. Postal sectors were selected with probability proportional to size, and stratified by region, and where the household reference person is in National Statistics Socio-Economic Classification (NS-SEC) 1-3 (employers in large organizations, higher managerial occupations and higher professional employees/self-employed) and the proportion of people aged >65 years.

Within each sector, 30 addresses ('delivery points') were selected randomly with a target sample size per survey of 1200 adults aged ≥ 16 years; one household within multioccupied address is sampled using a Kish Grid and one person per sampled household is selected for face-to-face interview using standard ONS procedures to randomly select one person. Because only one household member is interviewed per household, people in households containing few adults had a better chance of selection than those in households with many. A weighting factor is applied by ONS to correct for this unequal probability of selection, as well as for any differing rates of non-response for age group by sex.

Response rates

The survey interviews with Omnibus Survey sample respondents aged 16+ years took place, in their own homes in March 2010. The Omnibus survey response rate for completed interviews was 58% (1049) of 1823 eligible. Of the remainder, 31% (557) refused to participate and 9% (173) were not contactable during the interview period. For a further 2% (44), eligibility for inclusion was unknown.

This gave 1049 achieved interviews overall (adults of all ages). Although ONS does not collect information about non-responders, the sociodemographic characteristics of the sample were similar to those from mid-year population estimates for Great Britain (estimated from the 2001 census).

Measures

Well-being was measured by an unprompted open-ended survey question on perception of well-being (see Box 1). The open question was followed by common single-item survey questions: a 5-point Likert self-rating scale item of well-being overall, followed by mental well-being. In order to examine intercorrelations and overlap between indicators, additional

Box 1 *Questionnaire items*

Please tell me, what does the term 'well-being' mean to you? You can mention as many things as you like including mental or psychological and/or physical health issues, social relationships and activities and anything else you think of. There are no right or wrong answers. Overall, would you say your own well-being was [5-point response scale: very good-very bad]

Please rate your mental well-being, would you say your mental well-being was

[5-point response scale: very good-very bad]

In general, how satisfied are you with your life as a whole these days?

Please rate your satisfaction on a scale of 1-10, with 1 being low and 10 being high.

All things considered, how happy would you say you are

[4-point response scale: not at all happy-very happy]

Thinking about both the good and the bad things that make up your QoL, how would you rate the quality of your life as a whole?

[5-point response scale: very good-very bad]

items related to well-being were included (on the basis of literature equating well-being with these): self-ratings of life satisfaction, happiness and overall QoL; self-reported health status compared with others of the same age; physical functioning; reported long-standing illness, disability or infirmity and which limits activities; anxiety, nerves and depression; social participation and support^{28,42,43} and standard Omnibus Survey sociodemographic and socio-economic characteristics and classifications.

Responses were recorded verbatim. A thematic coding frame was designed by AB after reading all the transcripts, and the coding was then carried out by Corinne Ward, independently checked by AB.

Statistical methods

The main dependent variables of interest were self-rated well-being overall and mental well-being (both ranked very good, good, alright, bad and very bad). These were expressed as a ranked categorical variable. Univariate analyses were conducted to test associations between self-rated well-being overall and also mental well-being, with sociodemographic characteristics and social circumstances. Chi-square tests, means, independent samples *t*-tests, mixed design analysis of variance and Spearman's rank order correlations were used.

Independent associations with self-rated well-being and mental well-being were examined using classic logistic regression, with a binary dependent variable. The ranked categorical variables were dichotomized as 'good' (very good combined with good responses) 1 versus 'not good' (alright, bad, very bad responses) (0). The referent was 1. No correlation between the

entered independent variables exceeded $r = 0.550$, and all satisfied the lower 0.70 univariate threshold for entry into a multivariable model. Those variables that were statistically significant in the initial full models were re-entered into reduced models, excluding non-significant items apart from age and sex in order to adjust for them. Both full and reduced models are shown.

Results

Characteristics of respondents

Table 1 shows that over half the sample comprised women; the mean age of women was 48.90 years and for men was 49.21 years. The majority were white, as would be expected in a random sample of the national population. Just over a third (36%) were in managerial/professional socio-economic categories. Table 1 shows the means and distributions by sex and by age.

Perceptions of well-being and how it can be improved

Open-coded responses to the first question on perceptions of well-being are shown in Table 2. The most common response related to being in good health (67% = 705), followed by life satisfaction (21% = 220), positive outlook (19% = 200), financial security (19% = 201) and mental functioning (13% = 133). There were few associations with age, sex or income.

Fewer people aged 65+ years defined well-being in terms of life satisfaction (10% = 22 compared with 22% = 85 of those aged 45–64 years and 26% = 113 of those aged 16–44 years; chi-square 24.683, 2 d.f., $P = 0.001$). However, people aged 65+ years were more likely than younger people to define well-being as being able to continue to do the things they had always done: 14% = 31 compared with 6% = 22 of people aged 45–64 years and 4% = 18 of those aged 16–44 years (chi-square 24.815, 4 d.f., $P = 0.001$).

More of those on higher than lower incomes mentioned positive thinking: 26% = 64 of those earning £23 400+ mentioned this compared with 23% = 40 of those earning £14 560–£23 399, 14% = 29 of those on £8320–£14 559 and 17% = 42 of those earning less than this (chi-square 11.971, 3 d.f., $P = 0.007$). They were also more likely to mention financial security than those on lower incomes: 30% = 30 compared with 17% = 30, 16% = 34 and 14% = 35, respectively (chi-square 26.713, 6 d.f., $P = 0.001$).

The main responses are shown in Table 2. Supplementary Table 1 (available at *Family Practice* online) shows the full responses. The most common response to the next open-ended question on how the well-being of older people can be improved, related to having better access to services (28% = 298), followed by more social support (22% = 233), more social activities (17% = 179) and having more money (14% = 146) (see supplementary Table 2, available at *Family Practice* online).

Respondents on higher incomes of \geq £23 400 were more likely to mention having more money (23% = 57) compared with those on £14 560–£23 399 (10% = 18) and £8320–£14 559 (14% = 30) and those on less than this (£11% = 27) (chi-square 19.912, 3 d.f., $P = 0.001$). Women were more likely than men to mention more social activities (21% = 117 versus 13% = 62; chi-square 10.313, 1 d.f., $P = 0.001$). Younger people, aged 16–44 years, were more likely to mention more social support (26% = 10 compared with 24% = 93 of those aged 45–64 years and 14% = 32 of those aged 65+ years; chi-square 11.448, 2 d.f., $P = 0.003$).

In addition, respondents were asked a structured question how older people could be helped to remain in their own homes, given the importance of this to people.²⁹ Table 3 shows that the most common response given was provision of help with personal care needs, followed by help with household tasks, nursing care, visitors to check they are alright or to prevent loneliness and help with home repairs. They were also asked an open-ended question about anything else that could help them. Home adaptations were most commonly mentioned.

Self-assessed well-being and correlates

Most respondents rated their well-being, mental well-being, happiness, life satisfaction and QoL positively: 78% (802) rated their well-being overall as very good or good, as did 80% (826) in relation to their mental well-being; 66% (679) rated their life satisfaction on the top three points of a 1–10 scale (indicating high life satisfaction); 46% (472) rated themselves as very happy and 79% (826) rated their QoL as a whole as very good or good. The detailed responses, health and social circumstances and means for age and sex are shown in supplementary Table 3 (available at *Family Practice* online).

As would be expected, there were differences in mean health and functioning by age and sex, with women and older people having worse scores. Women were more likely to have undertaken exercise activities, and younger people were most likely to have gone to a cinema etc., while people in middle age groups were least likely to have gone to clubs. While there was no sex difference with available help with practical chores, men were more likely than women to have someone available for comfort, as were younger people. Older people were more likely to have available practical help, perhaps reflecting their greater needs. Consistent with this, as would be expected, they were more likely to report a long-standing illness and, as were women, difficulties with physical functioning. As expected, women were also most likely to report anxiety/nerves/depression. There were no age or sex differences in ratings of future chances of going into care (asked of people aged 65+ years only).

Supplementary Table 4 (available at *Family Practice* online) shows means for the indicators of well-being

TABLE 1 Well-being survey: characteristics of responders, and by sex and age

	% (n)
Age (years)	
16–17	1 (15)
18–19	1 (10)
20–24	6 (63)
25–29	6 (60)
30–34	8 (81)
35–39	9 (90)
40–44	8 (88)
45–49	8 (86)
50–54	9 (92)
55–64	18 (187)
65–74	17 (171)
75+	10 (106)
Total	1049
Mean ages by sex (SD)	
Female 48.90 (17.824)	
Male 49.21 (17.722)	
Two-tailed t-test: -0.281 ; $P = 0.772$ ns	
Sex	
Male	44 (457)
Female	56 (592)
Total	1049
Married/cohabiting	55 (578)
Single	20 (209)
Widowed	12 (122)
Divorced/separated	13 (136)
Same sex cohabitee	— (2)
Former/separated civil partner	— (2)
Total	1049
Married/cohabiting	
Female 62% (354)	
Male 69% (328)	
Chi-square 36.096, 6 df, $P = 0.001$	
Age (years)	
16–44 54% (231)	
45–64 80% (316)	
65+ 60% (136)	
Chi-square 340.036, 12 df, $P = 0.001$	
Household size (adults and children)	
1	28 (295)
2	38 (396)
3	15 (163)
4	13 (137)
5+	6 (58)
Total	1049
Mean (SD)	
Female 2.69 (1.345)	
Male 2.77 (1.366)	
Two-tailed t-test: -0.946 ; $P = 0.207$ ns	
Age (years)	
<65 3.00 (1.377)	
65+ 1.74 (0.611)	
Two-tailed t-test: 13.338; $P = 0.001$	
Number of adults in household (16+)	
1	34 (352)
2	52 (551)
3	9 (92)
4+	5 (54)
Total	1049

TABLE 1 Continued

	% (n)
Mean (SD)	
Female 2.16 (0.949)	
Male 2.33 (1.036)	
Two-tailed t-test: 2.741; $P = 0.012$	
Age (years)	
<65 2.38 (1.035)	
65+ 1.73 (0.583)	
Two-tailed t-test: 9.003; $P = 0.001$	
Housing tenure	
Owens outright	35 (362)
Owens on mortgage	34 (353)
Rents local authority/housing association	18 (190)
Rents privately	13 (141)
Total	1049
Rents LA/HA/privately	
Female 30% (169)	
Male 29% (136)	
Chi-square 3.621, 3 df, $P = 0.305$ ns	
Age (years)	
16–44 32% (178)	
45–64 18% (75)	
65+ 23% (52)	
Chi-square 293.000, 6 df, $P = 0.001$	
Car/van available for use in household	
Yes	77 (809)
No	23 (240)
Total	1049
Female 79% (450)	
Male 88% (419)	
Chi-square 15.384, 1 df, $P = 0.001$	
Age (years)	
16–44 84% (358)	
45–64 88% (349)	
65+ 72% (162)	
Chi-square 26.594, 2 df, $P = 0.001$	
Done paid work in last 7 days as employee or self-employed	
Yes	54 (563)
No	46 (485)
Total	1048
Yes	
Female 49% (278)	
Male 60% (285)	
Chi-square 13.279, 1 df, $P = 0.001$	
Age (years)	
16–44 67% (288)	
45–64 65% (256)	
65+ 19% (8)	
Chi-square 236.897, 2 df, $P = 0.001$	
NS-SEC five categories	
Managerial/professional occupations	36 (378)
Intermediate occupations	13 (139)
Small employers and own account workers	7 (77)
Lower supervisory and technical occupations	8 (85)
Semi-routine and routine occupations	28 (291)
Not classified	8 (79)
Total	1049
Managerial/professional	
Female 31% (178)	
Male 40% (190)	
Chi-square 66.972, 5 df, $P = 0.001$	
Age (years)	
16–44 31% (134)	
45–64 40% (158)	
65+ 34% (76)	
Chi-square 78.101, 10 df, $P = 0.001$	

TABLE 1 Continued

	% (n)
Highest level of education	
Degree or equivalent	19 (198)
Below degree level	44 (463)
Other	14 (149)
None (no qualifications)	23 (239)
Total	1049
No qualifications	
Female 23% (132)	
Male 18% (87)	
Chi-square 5.264, 3 df, $P = 0.153$ ns	
Age (years)	
16–44 11% (47)	
45–64 18% (73)	
65+ 44% (99)	
Chi-square 121.928, 6 df, $P = 0.001$	
Annual gross income	
Up to £8319	28 (243)
£8320–£14 559	24 (210)
£14 560–£23 399	20 (175)
≥£23 400	29 (250)
Total	878
Mean (SD)	
Female 17.3477 (8.159)	
Male 23.456 (9.514)	
Two-tailed t -test: -10.240 ; $P = 0.0001$	
Age (years)	
<65 21.214 (9.659)	
65+ 16.395 (6.738)	
Two-tailed t -test: 6.431; $P = 0.001$	
Ethnicity	
White British	89 (931)
White other	5 (51)
Other	6 (66)
Total	1048
Region	
North East	4 (48)
North West	13 (137)
Yorkshire and Humber	10 (102)
East Midlands	9 (94)
West Midlands	10 (102)
East of England	8 (81)
London	9 (91)
South East	14 (152)
South West	9 (100)
Wales	6 (58)
Scotland	8 (83)
Total	1049
Number of respondents	

ns, not statistically significant at least at the 0.05 level. Due to sample weighting numbers do not necessarily = 100%, t -tests were for independent samples, two-tailed tests; t -tests could only be performed on ranked or continuous variables (and with age dichotomized); for other variables, chi-square tests were performed and on three-category age groups.

by age and sex. Mixed design analysis of variance showed that there were no significant differences ($F_{1,121}$ not significant 0.339).

The intercorrelations (Spearman's rho) between related concepts were all highly statistically significant, with moderately high correlations: self-rated well-being, self-rated mental well-being, life satisfaction rating, happiness and QoL. No correlation was

TABLE 2 What does the term 'well-being' mean to you?

Having/being in good health/physical functioning, physically fit, strong, having energy, feeling well, retaining senses—sight, hearing and not being bed bound	67 (705)
Life satisfaction, enjoyment, enjoying life, happiness and being happy not depressed	21 (20)
Positive thinking, outlook/good/attitude to life/state of mind, keeping sense of humour, staying focused, not worrying, self-confidence, less stress, get up and do it, think positive, have a purpose in life, taking on challenges and being in control	19 (20)
Financial security, independence, adequate/sufficient income/pension (including for food, bills and transport) and no money worries/problems	19 (201)

You can mention as many things as you like including mental or psychological and/or physical health issues, social relationships and activities and anything else you think of. There are no right or wrong answers.

>0.663, confirming that these indicators are related but do not completely overlap, retaining their conceptual distinctions (Table 4).

Health, functioning, social participation and support, assessed chances of entering care, household size and indicators of socio-economic status (SES) were all significantly correlated with self-rated well-being overall and mental well-being (supplementary Table 5 is available at *Family Practice* online). Age and sex were not (and see earlier).

Significant independent variables were entered into a multivariable analyses for well-being and mental well-being, adjusting for age, sex, household size and indicators of SES. None of the sociodemographic or economic indicators achieved significance for overall or mental well-being.

The full model for overall well-being (see Table 5, Exp B) shows that those who ranked their health more negatively, who had difficulty with mobility and problems with anxiety, nerves and depression had significantly reduced odds of rating their well-being as good rather than not good. Those with no reported long-standing illness had almost four times the odds of those with long-standing illness of good rather than not good, overall well-being. Those who had more people available for comfort and support had increased odds of good rather than not good well-being.

Health status, long-standing illness, anxiety, nerves, depression and number of available supporters retained significance when entered into the reduced model. People with less than good health status had less than half the odds of those with good health of rating their overall well-being as good rather than not good. Those who reported no long-standing illness had almost twice the odds of those with a long-standing illness, of good, rather than not good, overall well-being. Those reporting anxiety, nerves and depression were about half as likely as those without

these symptoms to report their well-being as good rather than not good. Number of people available for practical support did not retain significance, while the odds of good versus not good well-being were multiplied by 1.002 for each additional available person for comfort and support.

The table also shows the models for mental well-being. Again, those with no problems with anxiety, nerves or depression had significantly reduced odds of rating their mental well-being as good rather than not good in the full and reduced models. Those who reported no long-standing illness had over seven times the odds of good rather than not good, mental well-being in the full model, and over three times the odds in the reduced model (but there were no significant associations with health status and mobility). Number of available practical helpers was not significant in the full model. As number of available supporters just missed significance at the 0.05 level in the full model, it was included in the reduced model, where it was highly significant. The odds of good versus not good mental well-being were multiplied by 1.073 for each additional available person for comfort and support.

TABLE 3 Population views of how older people can be helped to remain at home^a

	% (n)
Help with personal care needs	58 (613)
Help with household tasks	57 (598)
Help with nursing care needs	44 (462)
Visitors to check people are alright at home	42 (438)
Visitors for social contact and to prevent loneliness	37 (385)
Help with household repairs/maintenance	32 (333)
Support to get out of the house	30 (317)
Number of respondents	1049

Totals do not equal 100% as respondents could mention more than one theme; each theme coded once per respondent.

^aAdditional areas people mentioned (open-ended) here were financial help and support/grants (6%/66); more carers/community and nursing care/24-hour support at home (5%/55), family support (4%/45), home adaptations/equipment (4%/45), medical care (2%/19); emergency care/buzzers/alarms (2%/17); mobile shops/internet access for shopping (1%/5).

Discussion

Current health policy aims to promote well-being and mental well-being in populations, including among older people. A systematic review of interventions to promote mental well-being in older age concluded that most evidence supported exercise, followed by psychological interventions, although definitive research is still needed.⁴¹ There is some conceptual confusion in the policy and academic literature with interchangeable use of concepts, including well-being, life satisfaction, happiness and QoL. None of the correlations between these variables exceeded $r = 0.663$, confirming that these indicators are related but do not completely overlap, retaining their conceptual distinctiveness. Thus, care needs to be taken when defining variables of interest and their outcome indicators.

The strength of this study was that it was a national population survey of adults aged >16 years. The weakness was the response rate of 58%, although response rates of <60% are increasingly usual for population surveys. However, the data were weighted by ONS, based on population estimates derived from the last census, to compensate for any response bias. In this study, most men and women, in all age groups, rated their well-being and mental well-being positively. The study findings were consistent with Waddell and Jacobs-Lawson's analyses:²⁵ sociodemographic and economic variables had no significant impact on well-being or mental well-being when considered in multi-variable models. Self-rated health, mental health symptoms, long-standing illness and social support were the main drivers of overall well-being. Mental health symptoms, long-standing illness and social support were the main drivers of mental well-being.

People perceived well-being differently, depending on their age and level of income. People on higher incomes were more likely to mention the need for positive thinking and financial security for achieving well-being; those on lower incomes being least likely to mention these. Thus, having more money appeared to make people value it more. This is consistent with earlier research on people's perceptions of influences on QoL, where those in the higher income groups were more likely than those on lower incomes to mention having adequate finances.¹⁴

TABLE 4 Spearman's rank correlations between indicators of well-being

	Self-rated well-being overall	Self-rated mental well-being	Life satisfaction rating	Happy rating	Self-rated quality of life
Self-rated well-being overall	—	0.663**	-0.565**	0.485**	0.580**
Self-rated mental well-being	0.663**	—	-0.501**	0.457**	0.488**
Life satisfaction rating	-0.565**	-0.501**	—	-0.639**	-0.636**
Happy rating	0.485**	0.457**	-0.639**	—	0.579**
Self-rated QoL	0.580**	0.488**	-0.636**	0.579**	—

$P < 0.05$; ** $P < 0.01$ inverse correlations reflect different directions of coding.

TABLE 5 Adjusted ^a logistic regression showing independent associations [odds ratios (OR), 95% confidence intervals (CI)] with predictors of self-rated well-being and self-rated mental well-being

	Well-being ^b :	Mental well-being ^b :
	Full model <i>Exp B</i> (95% CI) P=	Full model <i>Exp B</i> (95% CI) P=
	Reduced model^c <i>Exp B</i> (95% CI) P=	Reduced model^c <i>Exp B</i> (95%CI) P=
In general, compared with other people your age, how would you rate your current health: excellent - Poor	0.428 (0.255-0.716) P = 0.001 0.366 (0.294-0.457) P = 0.001	0.634 (0.375-1.073) P = 0.90 ns
Are you able to walk at least 400 yards: no difficulty to Unable to do	0.414 (0.196-0.876) P = 0.021 0.767 (0.555-1.034) P = 0.080 ns	1.485 (0.603-3.658) P = 0.390 ns
In last 4 weeks suffered from anxiety, nerves, depression: not at all-extremely	0.358 (0.186-0.689) P = 0.002 0.594 (0.468-0.755) P = 0.001	0.116 (0.50-0.268) P = 0.0001 0.308 (0.242-0.391) P = 0.001
If you needed any practical help, doing everyday chores, how many people would help	0.891 (0.807-0.985) P = 0.024 1.012 (0.972-1.054) P = 0.557 ns	0.928 (0.841-1.035) P = 0.142 NS
If had a serious personal crisis, how many people could turn to for comfort and support	1.360 (1.141-1.621) P = 0.001 1.062 (1.012-1.114) P = 0.014	1.149 (0.999-1.321) P = 0.052 1.073 (1.028-1.120) P = 0.01

People aged 65+ years were more likely than younger people to define well-being as being able to continue to do the things they had always done and less likely to mention life satisfaction. Understanding the drivers of well-being among adults, including older adults, is of high policy importance. Greater understanding means that policy can be better informed and guided about what to target in order to promote

it. These analyses suggest that attention should be focused, not only on improvements in population health and functioning, and access to services, but on encouraging people to develop and maintain their social support networks and engagement in social activities. This is supported by respondents' emphasis on the need for visitors to check they are alright or to prevent loneliness, as one of the ways of enabling people to

TABLE 5 *Continued*

In last 4 weeks, gone to any clubs, community groups, organisations, education of recreation classes/meetings: yes/no	0.752 (0.281-2.009) <i>P</i> = 0.569 ns	0.826 (0.282-2.418) <i>P</i> = 0.727 ns
In last 4 weeks gone to cinema, theatre, concerts or other similar social entertainment: yes/no	1.284 (0.460-3.588) <i>P</i> = 0.633 ns	1.791 (0.551-5.818) <i>P</i> = 0.333 ns
In last 4 weeks, taken part in keep fit, swimming, sports, dancing, exercise classes, walking for exercise: yes/no	0.535 (0.193-1.487) <i>P</i> = 0.231 ns	0.406 (0.133-1.244) <i>P</i> = 0.115 ns
Any longstanding illness, disability, infirmity	3.736 (1.194-11.692) <i>P</i> = 0.024	7.592 (2.022-28.507) <i>P</i> = 0.003
	1.697 (1.098-2.623) <i>P</i> = 0.017	3.407 (2.281-5.089) <i>P</i> = 0.001
Household size (no of people)	0.855 (0.533-1.372) <i>P</i> = 0.516 ns	0.659 (0.406-1.068) <i>P</i> = 0.90 ns
Lives with someone in household as couple	0.475 (0.184-1.222) <i>P</i> = 0.122 ns	0.419 (0.160-1.099) <i>P</i> = 0.077 ns
Has car/van available for use in household	1.705 (0.520-5.587) <i>P</i> = 0.378 ns	1.061 (0.294-3.831) <i>P</i> = 0.928 ns
Highest education qualification	0.976 (0.784-1.214) <i>P</i> = 0.826 ns	0.860 (0.677-1.094) <i>P</i> = 0.220 ns
NS-SEC full	0.786	0.809

remain living at home rather than care homes. The promotion of mental and physical health is directly relevant to clinical practice. The important of informing the public about the wider benefits of maintaining social support and participation is a health promotion message that public policy needs to place greater emphasis on. However, large scale randomized trials are still required to support the most cost-effective interventions.

Supplementary material

Supplementary Tables 1–5 are available at *Family Practice* online.

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TABLE 5 Continued

classification	(0.593-1.041) <i>P</i> = 0.093 ns	(0.659-0.992) <i>P</i> = 0.042 0.960 (0.916-1.007) <i>P</i> = 0.092 ns
Annual gross income	0.990 (0.106-1.058) <i>P</i> = 0.766 ns	0.936 (0.856-1.023) <i>P</i> = 0.147 ns
Sex	2.336 (0.788-6.931) <i>P</i> = 0.126 ns 0.909 (0.627-1.319) <i>P</i> = 0.909 ns	1.175 (0.396-3.486) <i>P</i> = 0.772 ns 0.864 (0.594-1.256) <i>P</i> = 0.443 ns
Age - continuous	1.022 (0.894-1.061) <i>P</i> = 0.260 ns 1.008 (0.996-1.020) <i>P</i> = 0.179 ns	1.037 (0.992-1.084) <i>P</i> = 0.105 ns 1.004 (0.993-1.016) <i>P</i> = 0.474 ns
Constant (all significant at least at <i>P</i> = 0.05)	199.920 35.390	2313.510 3.373

^aAdjusted for age, sex and socio-economic factors (full and reduced models):

^bDichotomised as Good (Very good, Good) =1 vs. Not good (Alright, Bad, Very bad) =0; referent=1.

^csignificant variables were re-entered, with age, sex and indicators of SES.

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