

## Wellbeing factors found in USoc and how used in our model (or not)

Wellbeing indicators from research lit	Age UK Wellbeing Index Indicator	More on how used or not, why	Usoc variables used
	(Or how else used in the model)		
Engagement with arts and culture (not membership, but going to and frequency)	Creative and cultural participation		b_arts1freq, b_arts2freq, b_libfreq, b_arcfreq, b_musfreq, b_herfreq
Physical activity	Physical activities	We had some discussion about the suitability of this indicator, but we felt it includes (in our interpretation) not just the sports activities but also physical activities of a general nature.	b_sportact
cognition	Thinking ability	We used two indicators for memory and three for intelligence, based on literature	c_cgwr_dv, c_cgwr_i_dv, c_cgs7ca_dv, c_cgvfc_dv, c_cgna_dv
WEMWBS	Mental wellbeing		Sum of Warwick-Edinburgh Mental Well-being Scale (WEMWBS) using the variables d_scwemwba to d_scwemwbg
Feel optimistic	Mental wellbeing		
Feel useful	Mental wellbeing		
Relaxed	Mental wellbeing		
Deal well with problems	Mental wellbeing		
Feel close to others	Mental wellbeing		

Able to make own choices	Mental wellbeing		
Think clearly	Mental wellbeing		
Degree achieved/education level/qualification	Level of education		d_qfhigh_dv
Health, e.g. long-term illness, ADL/IADL	2 indicators: Health conditions; Longstanding illness or disability		Health conditions: sum of a_hcond1 to a_hcond16; longstanding illness: d_health
personality	The Big 5, broken down into 5 indicators by type.	These are the widely-used 'OCEAN' factors, but due to feedback we wanted all to be positive so inverted 'neuroticism' to 'emotional stability'.	Sum of scores in each of the five traits – e.g. agreeableness=sum(c_scptrt5a1 c_scptrt5a2 c_scptrt5a3).
engagement with society/community	2 separate indicators: Social Participation; Civic participation		Social participation: sum of c_orga12 to c_orga16; Civic participation: sum of c_orga1 to c_orga11
felt capable of making decisions about things	Mental health	Used as part of GHQ-12	One-factor solution using GHQ-12 variables from wave 4 (d_scghqa to d_scghql)
depression	Mental health	Used as part of GHQ-12	One-factor solution using GHQ-12 variables from wave 4 (d_scghqa to d_scghql)
felt constantly under strain	Mental health	Used as part of GHQ-12	One-factor solution using GHQ-12 variables from wave 4 (d_scghqa to d_scghql)
felt you couldn't overcome your difficulties	Mental health	Used as part of GHQ-12	One-factor solution using GHQ-12 variables from wave 4 (d_scghqa to d_scghql)

been able to enjoy your normal day-to-day activities	Mental health	Used as part of GHQ-12	One-factor solution using GHQ-12 variables from wave 4 (d_scghqa to d_scghql)
been able to face up to your problems	Mental health	Used as part of GHQ-12	One-factor solution using GHQ-12 variables from wave 4 (d_scghqa to d_scghql)
been feeling unhappy and depressed	Mental health	Used as part of GHQ-12	One-factor solution using GHQ-12 variables from wave 4 (d_scghqa to d_scghql)
mental health	Mental health	Used as part of GHQ-12	One-factor solution using GHQ-12 variables from wave 4 (d_scghqa to d_scghql)
confidence	Mental health	Used as part of GHQ-12	One-factor solution using GHQ-12 variables from wave 4 (d_scghqa to d_scghql)
get enough sleep/rest	Mental health	Used as part of GHQ-12	One-factor solution using GHQ-12 variables from wave 4 (d_scghqa to d_scghql)
feel useful	Mental health	Used as part of GHQ-12	One-factor solution using GHQ-12 variables from wave 4 (d_scghqa to d_scghql)
how worthwhile the things they do are	Mental health	Used as part of GHQ-12	One-factor solution using GHQ-12 variables from wave 4 (d_scghqa to d_scghql)
happiness (at some time interval, e.g. yesterday, last week, last month)	Mental health	Used as part of GHQ-12	One-factor solution using GHQ-12 variables from wave 4 (d_scghqa to d_scghql)

resources	Split into 2 indicators: Home owned outright; Home owner with a mortgage. Renters used as a comparator.	We split 'resources' into various financial and asset indicators; here it is around home ownership	d_hshownd
Benefits	No means-tested benefits		Inverse of benefits sum of c_ficode14 to c_ficode26 and c_ficode39
Income (pensions)	Level of pension income		Sum of c_ficode1 to c_ficode13
Marital status	Legal marital status broken into 3 indicators: married, divorced, widowed		d_marstat
Social networks	Have friends		c_closum (with a truncation at 22)
feel they belong to their neighbourhood	Neighbourliness of local area	Used as part of 'neighbourliness', which is synthesised from several questions in USoc	c_scopngbha to c_scopngbhh
Material wellbeing	Level of financial wealth	We used net wealth.	sum of d_svamt1 to d_svamt6
Lives alone	Live with other people	Household size	d_hhsize
Employment status	Working		d_jbstat
community and services support available {satisfied with shops and amenities available, e.g. post office, banks}	Broken into 4 indicators: Satisfaction with the standard of local leisure facilities; Satisfaction with the standard of local medical services; Satisfaction with the standard of local shopping facilities; and Satisfaction with the standard of local public transport	Used 'satisfaction with services'	c_Locserb, c_Locserc, c_Locserd, c_Locsere
caring duties	Intensity of caring duties broken into 3 indicators: none, low, high		d_aidhrs

resources (2)	Housing wealth	value of the property	d_hsval
needs being met	Intergenerational Connections		Sum of c_paid1 to c_paid97 and c_paidu1 to c_paidu97 and c_chaid1 to c_chaid97 and c_caidu1 to c_caidu97
Material deprivation	Material resources (inverse of deprivation)	We created a MATERIAL DEPRIVATION indicator using: holiday, money for self, keep up with bills, house, contents insurance, savings, furniture, and electrical goods. We also created a POVERTY indicator using: One filling meal a day, Go out socially, See friends/family, Holiday away from home, Replace cooker when broken, Home good state of repair, Services in working order, Damp-free home, Home kept warm, Has a telephone, Access to a car/taxi, Has warm waterproof coat, and Able to pay unexpected expense	Sum (d_matdepa to d_matdepj), reversed to be enter into the model as 'material resources'
Income level (household, individual)	Level of earnings	other than pensions (separate indicator)	Sum of c_ficode27 - c_ficode39
Debt	Financial debt	Total amount owed	d_debty
Children	Have children (adult)	Son/daughter alive but not living in the household	c_lvrel3

<b>Not indicators, but used in the analysis</b>			
Age		Used as a differentiating factor	d_dvage
Gender		Used as a differentiating factor	d_sex
<b>Analysed but not included in final model</b>			
Access and use of ICT		We didn't use this indicator for one technical statistical reason: its variance suggests there is a large measurement error	netuse' for Waves 1&2, 'netpuse' for Waves 3&4
Feeling safe from crime		Used 'neighbourliness', as 'worry about crime' question did not make any difference beyond the neighbourliness factor.	
Relative poverty (including housing indicators)		We have included the items that measure adult material deprivation, as recommended by McKay (2008) 'Measuring material deprivation among older people: Methodological study to revise the Family Resources Survey questions', Working Paper No 54, Department for Work and Pensions.	Sum of d_pdepa to d_pdepo
Religiosity		Not significant	d_oprlg (this is a different variable to the one asked about below)

Religiosity, spiritual fulfilment		The correlation between this indicator and the previous one was NEGATIVE.	Oprlg3. Religion makes a difference to life
Having children (age 16 under) in the house		Not significant	
Rural/suburban/urban		Analysed, but not included because per se it would not give us much insight. If any difference had to do with, say, public transport or local services, we had these covered already. If it was a question of social networks, income, neighbourhoods, the same.	
<b>Not enough responses to use in analyses</b>			
volunteered more than once a year		Not used because over 80% of respondents with no record	
Race/ethnicity		Not used because data for fewer than 2% of respondents.	
protection from abuse and neglect		Not used because 92% of respondents are 'not applicable'	
<b>Encapsulated in other indicators</b>			
Calm/peaceful		Part of mental wellbeing (relaxed)	
involvement in democracy and trust in how the country is run		Used Civic participation	

Access to leisure facilities		Not used. We used satisfaction with local leisure facilities instead	
anxiety		We incorporated an index of mental illness and another one of mental wellbeing	
control by the individual over day-to-day life (including over care and support provided and the way it is provided)		Control is not in the Big 5, but USoc questions refer to 'mastery' –one of the indicators in Ryff's scale of psychological wellbeing. There is a huge overlap between the Big 5 (particularly neuroticism, extraversion and conscientiousness) and mastery –see Anglim & Sharon (2016). 'Grant Predicting Psychological and Subjective Well-Being from Personality: Incremental Prediction from 30 Facets Over the Big 5', J of Happiness Studies, 17:59-80	
have trust in national Government		Used political participation as part of our civic participation indicator.	
suitability of living accommodation		Used the indicators of material deprivation as recommended by DWP (see above).	

Driving licence or access to car		<p>Used 'satisfaction with standard of transport'. We understand that satisfaction is more encompassing than access. Those respondents who said their satisfaction with local public transport was 'poor' were asked the reasons for such answer, among which we have 'lack of transport', 'no public transport', 'cost of transport', etc. So, those who can't access to public transport were included among those who responded 'poor'. However, if we had only used access, we would have lost the granularity that the satisfaction question gives us.</p>	
Services use		<p>We used Satisfaction with Standard of the following local services: medical services, shops, public transport, and leisure facilities because use of some services (eg. medical) is hardly a choice and reflects needs, which we covered in, for example, the long-standing illness or the health/co-morbidities indicator. However, what's not a given is how satisfied someone is with the</p>	

		service they received –and that’s what we measured.	
Healthy behaviours		The only ones available were around amount of fruit and veg eaten per day/week. We tried to look for ‘state’ indicators as much as possible.	
level of independence		We preferred to use long-standing illnesses and medical conditions (co-morbidities). We know that self-reported health status among older people tends to be higher than objective indicators would suggest for a number of reasons (eg, ‘Compared to Mrs X, I’m not <i>that</i> bad’) so we opted for more objective ones. Limitations due to health were covered with long-standing illnesses.	
manageability of life			
mobility			
<b>Didn't use because there were alternative measures</b>			
satisfaction with their lives overall		Correlation between predicted wellbeing scores as life satisfaction was high.	
satisfaction with their health		We used an aggregate index of health conditions (see above)	

health self-assessment		We used an aggregate index of health conditions (see above)	
satisfaction with the income of their household		We used household income by source	
having energy to do things		We used health indicators	
satisfaction with family life		We didn't use because they are dimensions of the life satisfaction construct, which we decided against incorporating as part of our operational definition of wellbeing.	
satisfaction with their job			
satisfaction with their amount of leisure time			
<b>Not in USOC</b>			
meaning in life			
overall quality of life			
feel sense of achievement in life			
congruence between desired and achieved goals			
access to health care			
self-care			
having someone they could really count on in a crisis			
feeling loved			
alienation			
likable			
loneliness			
intimacy			
coping			

harm avoidance			
purpose in life			
personal dignity (including treatment of the individual with respect)			
satisfaction with their use of leisure time			
interest in community/society			
the individual's contribution to society			
having things to do			
accessed green spaces at least once a week			
age-friendly community, e.g. easy to walk - pavements, public toilets, litter control, graffiti control			
registered voter who voted			
attitude towards aging			
autonomy			
Social Care Services			
independent functioning			
personal fulfilment			
personal growth			
productivity			
stability			
pet ownership			
without children			
satisfaction with their social life			

satisfaction with living accommodation			
pain			
use of social media			
<b>Indicators - area level (local up to national)</b>			
Healthy life expectancy			
Unemployment (rate for area)			
Crimes against the person (per 1,000 adults)			
living in households with less than 60 per cent of median income after housing costs			
UK public sector net debt as a percentage of GDP			
Inflation rate (as measured by the Consumer Price index, Age UK Enterprises Silver RPI ?)			
registered voters who voted			
Total greenhouse gas emissions (millions of tonnes)			
Air pollutants - PM10 (000's tonnes)			
The extent of protected areas in the (area) (Millions hectares)			
Energy consumed within the (area) from renewable sources			