Centre for Ageing Better

Quantitative analysis

Understanding the experiences of those approaching later life

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November 2021

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This research was commissioned by the Centre for Ageing Better and produced by University College London. Ageing Better also commissioned complementary qualitative research from the Institute for Public Policy Research (IPPR). Ageing Better have produced a summary report that brings together both elements of the research and outlines their recommendations. Both reports are available to download from the Centre for Ageing Better's website. This report does not necessarily reflect the Centre for Ageing Better's views.

Contents

1 Introduction

Millions of people worldwide are missing-out on a long, healthy and fulfilling later life [1]. In those living past middle age, chronic ill-health and lack of economic, psychological and social resources frequently contribute to a lack of flourishing [2, 3]. The size of this health inequality is staggering [4-9]. A 50-year spread in average life expectancy is observed between countries globally, and within country ranges average two decades or more [7]. Previous studies suggest that health inequalities can become amplified over the life-course due to the interaction of economic and social factors with time [3]. Healthy life expectancy varies by socio-demographic factors including gender, socioeconomic status (SES), deprivation and ethnicity [10-15]. Recent findings suggest that the least wealthy third of people (England and US) typically miss-out on 7-9 years of healthy life, compared to the wealthiest third [16]. There is a marked paucity of research exploring the experiences of older people from black and minority ethnic groups. This is despite the higher burden of socio-economic disadvantage, exclusion and discrimination frequently experienced [15, 17]. There has been speculation that this lack of enquiry represents institutional racism [15, 17]. Due to patterns of migration in the last century, people from minority ethnic groups in the UK will be reaching later life in increasing numbers in the near future, heightening the need for further research.

In this document, we report the quantitative results of the Centre for Ageing Better (CfAB) mixed-methods project. Details of each research question can be found in the relevant sections (3.1, 4.1, 5.1 and 6.1). In brief, the study's initial aims were to describe this group, define a "good" later life, identify those at risk of missing-out on one and explore the relationship between this risk and measures of well-being. The study then aimed to quantify the frequency of key life-events (e.g. retirement or becoming a carer) and describe their relationships with well-being and financial status. The final quantitative aim was to examine how the experiences of this cohort (people in their 50s and 60s in 2018) changed over calendar time by comparing the current cohort with people of a similar age in 2002. The selection of study variables was guided by the inter-related dimensions of a good later life proposed by the Centre for Ageing Better and conceptualised visually by their Venn diagram, shown in Figure 1.

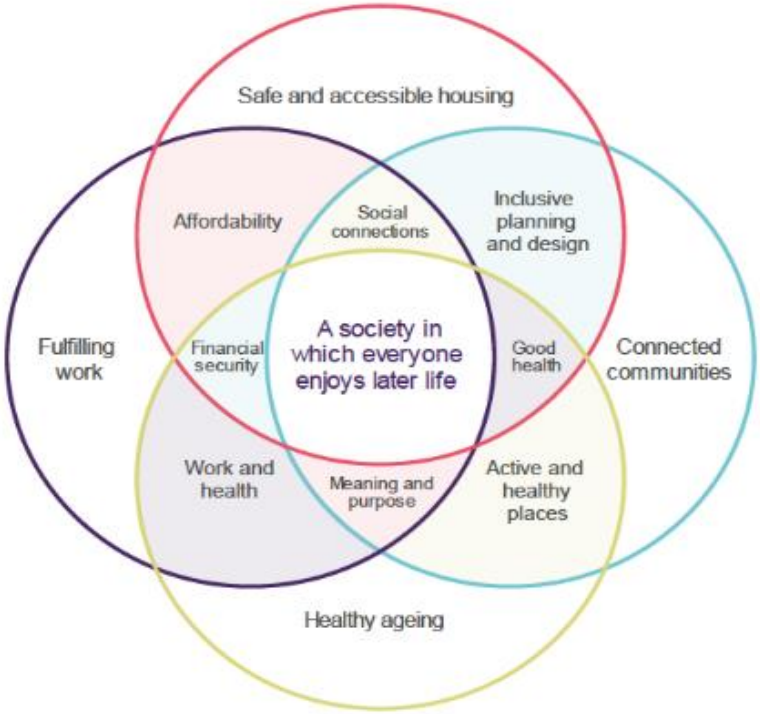

Figure 1.1 The Centre for Ageing Better: dimensions of a good later life

2 Data source

2.1 Introduction

The study utilised data from two sources: ELSA and Understanding Society. Inclusion of data from both studies enabled a greater breadth of factors to be explored than was possible with either alone. ELSA provides a detailed recount of the experiences of people aged 50-69 in England, as it is a representative sample of the older population. Understanding Society, although not specifically focussed on older people, is used to bring in the ethnic variation component. The intentional over-sampling of non-white groups in Understanding Society (see Section 2.3) provided a larger sample for their analysis, compared to ELSA. Due to the different focus and differences in variables captured and definitions, data from the two studies were analysed separately.

2.2 The English Longitudinal Study of Ageing (ELSA)

ELSA is an ongoing longitudinal study, which started in 2002. It is a nationally representative sample of people living in private households in England aged over 50 years and their partners. It aims to further our understanding of the ageing process by exploring multiple objective and subjective facets of people's lives (explore https://www.elsa-project.ac.uk/).

The initial sample comprised 11,050 people who have been followed-up biennially. Sample refreshment has been undertaken periodically to replace (with demographically similar people) those who have died, no longer wish to participate or are otherwise lost to follow-up. Stratified random sampling methods have been employed.

At each assessment (Wave), data are collected at both household and individuals level. A computer-assisted personal interview is the primary means of data collection, supplemented with a self-completed questionnaire. In addition, the dataset is enriched periodically by clinical data from nurse visits.

To address the first and second question of this study, we used Wave 9 (2018/19) of ELSA. The sample included 3,644 individuals aged 50-69 years. Analysis was restricted to the 3,511 people for whom records were complete. In addition, data from earlier ELSA waves (1 to 8) were added for questions exploring changes over time. For research Question 4, which involved a cohort comparisons, Wave 1 (2002/2003) was used.

2.3 Understanding Society

Understanding Society (the UK Household Longitudinal Study (UKHLS)) is an on-going nationally representative panel study of households and their occupants in the UK. The study started in 2009, with an initial sample of individuals from 39,802 households. It is one of the largest studies of its type internationally (explore https://www.understandingsociety.ac.uk/).

In contrast to ELSA, Understanding Society is not exclusively focused on older people. It includes those of all ages, from households in all parts of the UK (England, Scotland, Wales and Northern Ireland). Data are collected annually via face-to-face visits in people's homes and through a self-completed questionnaire. Stratified random sampling (except for Northern Ireland) is used. In addition, migrants and people from black and minority ethnic groups are intentionally over-sampled.

The study explores many aspects of people's lives at a personal and household level. It also analyses the impact of regional and national policies and initiatives on the population. Information gathered includes demography, household finance, work, health, social relationships, education, family, and social engagement.

Wave 9 of Understanding Society was used for research Questions 1 and 2 of this project. (2017/18). We restricted the analyses to 10,511 people aged 50-69 years living in England. Of these, 10,296 had complete information on the variables of interest. Of the sample, 1,910 people were from black and minority ethnic groups (BAME).

Possible limitations of the surveys

When interpreting the results of this report is important to remember that ELSA is a nationally representative sample of older adults living in private households in England. It is therefore possible to generalize all results obtained from ELSA to the population of people aged 50-69 living in England. On the other hand, Understanding Society is oversampling minority ethnic groups and the focus of the survey is on the whole UK population and not specifically on older people. Despite using sampling weights to help with representativeness, non-response and oversampling of ethnic minority groups, generalization of results from Understanding Society should be done with caution.

3 “Who are this group?”

3.1 Research Question

The first study question posed by CfAB was, “Who are this group?” The aim of this question was to describe the study populations with respect to sociodemographic factors and other variables of interest.

3.2 Methods

3.2.1 Introduction

ELSA and Understanding Society data were analysed separately due to differences in variable capture and definition. Wherever feasible, comparable variables in each dataset were categorised in a similar way. Relevant sample weights were applied to enhance the generalisability of findings at population level.

The results for this research question are summarised separately for ELSA and Understanding Society. Tables and accompanying text are presented for: demographics, socioeconomic status, housing, work/retirement, caring, the intersection of work and caring and geographical characteristics. Data linkage to the Office for National Statistics (ONS) lower layer super output area data (LSOAs) for each household was undertaken to permit the inclusion of geographical data.

For each set of results (Section 3.3.1 for ELSA and 3.3.2 for Understanding Society), Table As comprise weighted percentages and Table Bs weighted numbers for each group. The prevalence of individual metrics are described (weighted %, n) overall and stratified by demographic factors. Means (standard deviation (SD)) are reported for central values unless otherwise stated. In all results where weighted sample size is <50, cases are enclosed in square brackets. A brief summary brings the descriptive analyses of this chapter to a close (Section 3.4).

3.2.2 ELSA

ELSA (Wave 9, 2018) data are presented by age group (50-59, 60-69 years) and sex. Differences by ethnic group (white vs. non-white) are described in the text where observed.

Demographic factors reported comprise: gender, current age (mean, SD), ethnicity (white, non-white), household living arrangements (lives alone, with partner, with others), household size (mean, SD) and marital status (never married, married, separated/divorced, widowed). There were insufficient numbers of people of non-white ethnicity to make further divisions by ethnic group meaningful. Civil partnerships were grouped with marriage and separation/divorce as appropriate.

To quantify socioeconomic status, quintiles of net equivalised (non-pension) wealth and weekly income were reported (%, mean, SD). In addition, highest academic qualification attained (<O-level, O-level, A-level, Post A-level) were summarised.

Home tenure was reported as three categories: owned outright, owned with debt and renting. For those renting, proprietors were classified into one of four categories: local authority/council, housing association/charity, private owner, other. Housing problems were identified from a binary variable (none, any). Where applicable, the type of housing problems was also reported, grouped as follows: noisy neighbours, noise from street, lack of space, excess condensation, damp, cold, pollution, water leaks, pests and other (which included any combination of issues relating to electricity, plumbing, lighting, rot or any other problems).

Retirement status was categorised as completely retired, in paid work, unable to work, not in paid work, looking after the home and other. A binary variable was generated to classify workers as full or part-time (<30 hours/week).

Caring responsibilities were captured by two variables: caring for grandchildren (yes or no in the last year) and caring for a friend/relative (yes or no in the last month). These variables were also combined to generate a binary variable for any caring responsibilities. The intersection of work and caring were then explored by cross-tabulation.

The government office region (nine areas) in England where households were located was reported (North East, North West, Yorkshire & Humber, East Midlands, West Midlands, East of England, London, South East, & South West). Households were classified as urban or rural. The Index of Multiple Deprivation (IMD) was reported by quintile, with 1 being the least and 5 the most deprived.

3.2.3 Understanding Society

Analysis of Understanding Society was restricted to individuals resident in England, aged 50-69 years with a completed main survey in Wave 9 and ethnicity data (2018/2019). In contrast to ELSA, active over-sampling of BAME was undertaken, which increased study power for these groups. Data are presented by ethnic group and gender. Ethnic groups were categorised as white, black, Asian and all BAME combined. In addition to people of black and Asian origin, the "all BAME" group also included all other people identifying as non-white. Statistically significant differences by age group (50-59, 60-69 years) were described where observed (using a $p<0.05$).

Demographic factors reported included gender, current age (mean, SD), ethnicity (white, non-white), household living arrangements (lives alone, with partner, with others), household size (mean n, SD) and marital status (never married, married, separated/divorced, widowed). Civil partnerships were grouped with marriage and separation/divorce as appropriate.

Socioeconomic status was reported by quintile of net equivalised household income and highest academic qualification attained (<O-level, O-level, A-level, post A-level). Net wealth data were not available.

Home tenure was summarised as three categories: owned outright, owned with debt and renting. For those renting, proprietors were classified into one of four categories: local authority/council, housing association/charity, private owner, other. Housing problems were not captured in Wave 9 of Understanding Society.

Work/retirement status was grouped as completely retired, in paid work, unable to work, not in paid work, looking after the home and other. A binary variable classified workers as full or part-time (<30 hours/week).

Caring was defined as currently caring for a friend/relative. Hours spent caring was also reported (<20 and 20+ hours/week). Information on caring for grandchildren is not captured in Understanding Society. The intersection of work and caring was explored by cross-tabulation (split by ethnicity but not gender due to the small sample size).

The government office region of England was reported in the same way as for ELSA. Households were classified as urban or rural and the IMD quintiles reported (1 least and 5 most deprived).

3.3 Results “Who are this group?”

3.3.1 ELSA

3.3.1.1 Demographic characteristics

The analysis included 3,511 people aged 50-69 years who contributed data to Wave 9 of ELSA (2018). Table 3.1a summarises the demographic characteristics of those included (weighted sample size reported in Table 3.1b).

There were slightly more women (52%) than men. The average age was 60 years. White ethnicity predominated (92%). This varied with age, with 10% of those aged 50-59 years reporting non-white ethnicity compared to 6% of those aged 60-69 years. Although most individuals lived with a partner (71%), 19% lived alone and 10% shared a home with people other than a partner. Household composition varied by age group, gender and ethnic group. Men in both age groups were more likely to be living with a partner than women were. Men in their 50s more frequently lived alone than women of a similar age (19% vs. 16%). This pattern reversed for those in their 60s, with 18% of men living alone compared to 22% of women. People of non-white ethnicity were less likely to live alone than those of white ethnicity (9% vs. 20%) and were more likely to live with people other than a partner (18% vs. 9%).

Households commonly contained between one and three people (most frequently two), with little difference across groups. Although the majority (67%) of people were married, this also varied by demographic characteristics. People in their 50s were more likely than people in their 60s to be divorced, separated or have never married, but less likely to be a widow(er). Women were more likely than men to be separated or divorced and less likely to have never married.

Table 3.1a. Demographic characteristics, ELSA 2018

	Age group (years) %*							
	50-59		60-69		50-69			
	Male	**Female**	**Male**	**Female**	**Male**	**Female**	**p-value gender difference[1]**	**All**
Gender	47	53	48	52	48	52	<0.001	
Mean age (years)	56	55	64	64	61	60	0.6	60
Ethnicity								
White	88	92	94	93	91	93	0.3	92
Other	12	8	6	7	9	7		8
Living arrangements								
Lives alone	19	16	18	22	18	19	<0.001	19
Lives with partner	74	67	77	67	76	67		71
Lives with others[3]	7	16	5	11	6	13		10
N in household mean (SD)	3 (1)	3 (1)	2 (1)	2 (1)	2 (1)	2 (1)	0.4	2
Marital status[4]								
Never married	14	13	13	8	13	10	<0.001	10
Married	67	62	71	63	69	63		67
Separated/divorced	16	23	14	20	15	21		17
Widowed	2	2	3	9	3	6		6

* Percentage and means have been estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified [2] T-test [3] Includes family and friends [4] Married & divorced including the creation and dissolution of civil partnerships

Table 3.1b. Demographic characteristics weighted sample size, ELSA 2018

	Age group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Gender	729	809	972	1052	1701	1862	3563
Ethnicity	730	810	972	1052	1701	1862	3563
Living arrangements	729	809	972	1053	1701	1862	3562
Marital status[2]	728	809	972	1052	1700	1861	3561

* Numbers have been estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] Includes family and friends [2] Married & divorced including the creation and dissolution of civil partnerships

3.3.1.2 Socioeconomic characteristics

Table 3.2a highlights socioeconomic characteristics (weighted sample size reported in Table 3.2b). Marked differences in these measures were observed by gender, age and ethnic group.

Huge disparities in net wealth between the richest and poorest were also evident. It would take the average combined net wealth of 200 people in the poorest wealth group (bottom 20% of wealth distribution) to equal the average value of a single person in the richest group (top 20% of the wealth distribution). Those of non-white ethnicity were under-represented in the richest group (12% vs. 21%) and over-represented in the poorest group (29% vs. 19%). The poorest group were living on <£150 per week compared to >£1000 for the richest group.

Over a third of individuals had no educational qualifications/those below O-level standard. Women were less likely to have higher-level qualifications (A level or above) than men. This pattern was more apparent in those aged 60-69 years. Highest educational qualification attained differed by ethnic group ($p<0.05$). Those of non-white ethnicity were paradoxically more likely to be in either the highest (>A-level) educational attainment group (36% vs. 30% for white) or the lowest (<0-level) group (41% vs. 34%).

Table 3.2a. Socioeconomic characteristics, ELSA 2018

	Age Group (years) %*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value gender difference[1]	All
Wealth quintiles								**Mean £[2]**
Lowest	18	26	19	18	19	21		6582
2	24	21	17	19	20	20		144,856
3	22	19	19	21	20	20		302,671
4	21	19	21	20	21	20		514,052
Highest	16	15	25	22	21	19		1,353,392
Income quintiles								**Mean £[3]**
Lowest	18	21	20	21	19	21	<0.05	143 (SD)
2	16	19	19	25	17	22		281
3	18	20	22	20	20	20		387
4	23	20	19	18	21	19		527
Highest	25	20	20	16	23	18		1036
Education								**%**
<O-level	44	34	37	28	40	30	<0.001	35
O-level	10	11	9	11	10	11		10
A-level	20	37	17	26	18	30		25
Post A-level	25	18	37	36	32	28		30

* Percentages and means have been estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified. [2] Net wealth [3] Weekly net income per benefit unit

Table 3.2b. Socioeconomic characteristics weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Wealth quintiles	703	795	965	1042	1669	1836	3505
Income quintiles	703	793	965	1042	1668	1836	3505
Education	594	708	934	1007	1527	1714	3241

* Numbers have been estimated using sampling weights [2] Net wealth [3] Weekly net income per benefit unit

3.3.1.3 Housing

Table 3.3a summarises home ownership status and housing problems (weighted sample size reported in Table 3.3b).

About 20% of 50-69 year olds were renting. Of these renters, 18% were renting privately, with almost all the rest in social housing. Renting privately was more common for people in their 50s. It was also more common for those of non-white ethnicity (26% vs. 16% for white, $p<0.001$).

Debt-free home ownership was more common for people in their 60s (68% vs. 37% for those in their 50s), but did not differ by gender. However, there was strong evidence that ownership status varied by ethnic group, being much more common in those of white ethnicity compared to BAME (57% vs. 33%, $p<0.001$).

Table 3.3a. Home ownership, ELSA 2018

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value gender difference[1]	All
Tenure of home								
Owned outright	38	37	67	69	54	55	0.7	55
Owned with debt	44	41	15	14	27	25		26
Renting	18	23	19	17	19	19		19
Renting from								
Local authority/council	22	31	35	46	30	38	0.4	34
Housing association/charity	49	36	39	42	44	39		41
Private landlord	20	25	17	11	18	18		18
Other	8	8	8	2	8	5		7

* Percentages have been estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified [2] Of those reporting any housing problems [3] Other problems comprise: electrical, plumbing, too dark, rot or other (more than one may be present simultaneously)

Table 3.3b. Home ownership and housing problems, weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Tenure of home	573	792	935	1210	1508	2002	3510
Renting from	123	174	175	167	298	341	637

Numbers have been estimated using sampling weights [1] Of those reporting any housing problems [2] Other problems comprise: electrical, plumbing, too dark, rot or other (more than one may be present simultaneously)

3.3.1.4 Work and retirement

More than one in twenty people were permanently unable to work due to ill health (Table 3.4a and weighted sample size in Table 3.4b). Around a third of people had retired completely and more than half were still in paid work. Retirement status varied markedly by ethnicity, with those from the non-white group being much less likely to have retired than those of white ethnicity (15% vs. 30%, $p<0.001$). Retirement status was strongly associated with age, being unsurprisingly more common in those 60-69 years (43% men and 50% of women compared to 6% and 4% from men and women in their 50s). Women were more likely than men to, work part-time (45% vs. 17%) and more likely to have been looking after their home and family (6% vs. 2%).

Table 3.4a. Work and retirement, ELSA 2018

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value gender difference[1]	All
Retirement status								
Completely retired	6	4	43	50	27	30	<0.001	29
In paid work	81	79	45	35	61	54		57
Unable to work	6	6	6	4	6	5		6
Not in paid work	1	1	1	0	1	1		1
Other	5	3	3	5	4	4		4
Looking after home	1	7	2	5	2	6		4
Work hours[2]								
Full time[3]	92	64	69	39	83	55	<0.001	68
Part-time	8	36	31	61	17	45		32

* Percentages have been estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified [2] For those in work [3] Full-time was classified as ≥30 hours per week

Table 3.4b. Work and retirement weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Retirement status n	730	810	971	1052	1700	1861	3562
Work hours[1] n	444	564	313	300	757	864	1622

* Numbers have been estimated using sampling weights [1] For those in work [2] Full-time was classified as ≥30 hours per week

3.3.1.5 Caring responsibilities

Table 3.5a presents the prevalence of caring responsibilities (weighted sample size in Table 3.5b). Around a quarter of people had been recently caring for an ill or frail relative or friend. This was more likely for women than men.

Caring for grandchildren was common, with 68% of women and 60% of men who have grandchildren reporting that they had done some grandchild care in the last year.

A little under half of people irrespective of gender, age group or ethnicity were involved in caring in some capacity. There was little evidence that caring responsibilities varied by ethnicity.

Table 3.5a. Caring responsibilities, ELSA 2018

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value gender difference[1]	All
Relative/friend care[2]								
No	80	71	80	71	80	71	<0.001	75
Yes	20	29	20	29	20	29		25
Grandchildren care[3]								
No	42	32	39	32	40	32	<0.001	35
Yes	58	68	61	68	60	68		65
Any caring[4]								
No	69	56	54	42	60	48	<0.001	54
Yes	31	44	46	58	40	52		44

* Percentages have been estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] χ2-test unless otherwise specified [2] In last month [3] In last year for those with grandchildren [4] Including caring for a relative/friend or grandchildren

Table 3.5b. Caring responsibilities weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Relative/friend care[2]	729	810	972	1052	1701	1862	3563
Grandchildren care[3]	201	302	580	715	782	1017	1799
Any caring[4]	729	810	972	1052	1701	1862	3563

* Numbers have been estimated using sampling weights [2] In last month [3] In last year [4] Including caring for a relative/friend or grandchildren

3.3.1.6 The intersection between work and caring

Table 3.6a explores the intersection between caring and retirement status (weighted sample size reported in Table 3.6b). Those permanently unable to work were less likely to have a caring role and those looking after the home or in paid work, were more likely to have one when compared to other groups. Retired women were more likely to be caring for others than men who had retired (60% vs. 50%, p<0.001). There was a similar gender disparity for those still in work (47% for women vs. 36% for men, p<0.001).

Table 3.6a. The intersection between work and caring, ELSA 2018

	All ages (50-69 years) %*		
	No caring duties	**Caring duties**	**p-value for the difference[1]**
Completely retired	45	55	<0.001
In paid work	58	42	
Permanently unable to work	77	23	
Not currently in paid work	66	34	
Other	44	56	
Looking after home/family	30	70	

* Percentages are estimated using sampling weights and are of the total for each work category

Table 3.6b. The intersection between work and caring weighted sample size, ELSA 2018

	No caring	**Caring duties**	**Total**
Work status	1,916	1,647	3,562

* Numbers are estimated using sample weights

3.3.1.7 Geographical location

Study participants were widely distributed across England, irrespective of gender or age group (Table 3.7a and weighted sample size in Table 3.7b). However, distribution varied by ethnic group, with those of non-white ethnicity less likely to live in the North-East (<1% vs. 6%), but more likely to live in the West Midlands (15% vs. 10%) and London (44% vs. 10%) than those in the white ethnic group. Three-quarters of people lived in urban areas. Rural living was much more common in those of white ethnicity compared to non-white (24% vs. 3%). A slightly higher percentage of women lived in rural areas compared to men (24% vs 21%). There was strong evidence that people identifying as non-white were over-represented in the most deprived locations (24% vs. 15%, $p<0.01$ were in the most deprived quintile).

Table 3.7a. Geographical characteristics, ELSA 2018

	Age Group (years) %*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p[1]	All
Region								
North East	5	6	5	5	5	6	0.3	5
North West	15	13	13	12	14	12		13
Yorkshire & Humber	9	9	10	11	10	10		10
East Midlands	9	8	10	9	10	9		9
West Midlands	9	10	12	11	10	11		10
East of England	12	12	10	14	11	13		12
London	16	10	13	12	14	11		13
South East	17	19	15	15	16	17		17
South West	9	12	11	12	10	12		11
Home location								
Urban	80	79	78	74	79	76	0.1	78
Rural	20	21	22	26	21	24		22
Deprivation (IMD[2])								
Least (1)	23	21	21	24	22	23	1.00	22
2	21	24	25	22	23	23		23
3	22	19	19	20	20	20		20
4	20	19	18	19	19	19		19
Most (5)	13	17	17	14	16	16		16

* Percentages are estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1]χ2-test unless otherwise specified [2] Index of multiple deprivation-split into 1/5ths

Table 3.7b. W9: Geographical characteristics weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Region n	731	810	967	1051	1695	1858	3555
Home location n	730	808	970	1052	1699	1861	3560
Deprivation (IMD[1]) n	729	808	969	1053	1698	1862	3560

* Numbers are estimated using sampling weights [1] Index of multiple deprivation-split into 1/5ths

3.3.2 Understanding Society

3.3.2.1 Demographic characteristics

Table 3.8a explores demographic characteristics (sample size in Table 3.8b). The average age was 59 (SD 6) years for white and 57(5) years for BAME.

Compared to the white group, those in the black ethnic group were more likely to live alone (54% vs. 27%) and less likely to live with a partner (40% vs. 60%). Conversely, a higher percentage of Asian people lived with a partner (83% vs. 27% for white) and a lower percentage lived alone (16% vs. 60% for white). Men across all groups were more likely to live with a partner than women were.

Households most commonly contained between two and four people (mean 3), with the Asian group more likely to live in larger households (mean 4; SD 2) and white the smallest (2; 1).

Across all ethnic groups, men were more frequently married (or remarried) than women. Those of Asian ethnicity reported the highest prevalence of marriage (57%) and those of black ethnicity the lowest (42%). Women were more likely to have been widowed than men.

Table 3.8a. Demographic characteristics, Understanding Society 2018

	Ethnic Group %*/Mean (SD) *									
	White			Black			Asian			BAME Combined
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Gender	49	51		38	62		52	48		
Age mean (SD)	59 (6)	59 (6)	59 (6)	57(5)	57(5)	57(5)	57(6)	57(6)	57(6)	57 (5)
Household										
Lives alone	24	30	27	48	58	54	12	21	16	33
Lives with partner	67	62	65	47	36	40	87	78	83	63
Lives with others[1]	9	8	8	5	5	5	1	0	1	3
N in household (mean (SD))	2(1)	2(1)	2(1)	3(2)	3(1)	3(1)	4(2)	4(2)	4(2)	3(1)
Marital status[2]										
Never married	21	15	18	33	37	35	7	5	6	20
Married	68	62	65	51	36	42	89	79	84	65
Separated/divorced	9	17	13	16	22	20	3	8	6	11
Widowed	2	5	4	0	5	3	1	8	4	4

* Numbers have been estimated using sampling weights. Sex and ethnicity specific percentages/means/SDs are of the total number of that sex by ethnicity group. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white Missing have been omitted [1] Includes family and friends [2] Married & divorced includes the creation and dissolution of civil partnerships

Table 3.8b. Demographic characteristics weighted* sample size, Understanding Society 2018

	Ethnic Group n									
	White			Black			Asian			BAME Combined
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Household	3675	3896	7571	51	82	133	121	113	234	457
Marital status[2]	3672	3892	7566	50	82	132	121	115	235	457

* Estimated using sampling weights. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white Missing have been omitted [1]Includes family and friends. [2] Married & divorced includes the creation and dissolution of civil partnerships

3.3.2.2 Socioeconomic characteristics

Table 3.9a summarises socioeconomic characteristics by ethnic group and gender (sample size in Table 3.9b).

Approximately a third of individuals had no educational qualifications/those <O-level standard.

White and black women were more likely to hold a degree level qualification than men from their ethnic group, whilst Asian women were less likely to do so.

On average, net adjusted household weekly income was £100 lower for those in the black ethnic group compared to white. The poorest group (bottom 20% of the distribution) of households were living on, on average, ~£200 a week, whilst the richest group (top 20% of the income distribution) had, on average, over £1000 a week at their disposal.

Table 3.9a. Socioeconomic characteristics, Understanding Society 2018

	Ethnic Group %*/mean(SD)*									
	White			Black			Asian			BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	Combined
Education (level)										
<O	36	34	35	[32]	22	26	37	39	38	31
O	21	21	21	[18]	12	14	10	13	11	13
A	8	6	7	[7]	5	6	11	13	12	9
Post A	35	39	37	[43]	61	54	42	35	38	47
Income quintiles[1]										**£/wk**
Lowest	18	21	20	29	30	30	27	24	26	200 (64)
2	20	20	20	24	23	23	15	19	17	327 (29)
3	20	20	20	19	17	18	21	24	22	430 (31)
4	21	20	20	14	17	16	19	14	17	559 (47)
Highest	21	19	20	14	13	13	18	18	18	1010 (891)
£/wk	511	487	499	370	408	397	458	545	500	497
(SD)	(534)	(412)	(476)	(220)	(204)	(210)	(314)	(858)	(640)	(477)

* Percentages and means have been estimated using sampling weights. Sex and ethnicity specific percentages/means/SDs are of the total number of that sex by ethnicity group. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white [1] Net income adjusted for number in household. All results where the weighted sample size is <50 cases are enclosed in square brackets.

Table 3.9b. Socioeconomic characteristic weighted* sample size, Understanding Society 2018

	Ethnic Group n									
	White			Black			Asian			BAME Combined
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Education	3,308	3,516	6,822	44	79	125	108	105	213	414
Income quintiles	4221	4516	8737	65	92	158	149	145	295	554

* Estimated using sampling weights. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white. Missing have been omitted [1] Net household income adjusted for number in household

3.3.2.3 Housing

Table 3.10a summarises home ownership/tenure. For those renting, the proprietor type is described (sample size in Table 3.10b).

There were marked differences is home ownership by ethnic group. BAME were much less likely to own their home outright and more likely to be renting than people in the white ethnic group. This disparity was greatest for those of black ethnicity, who were three times less likely to own their own home outright and more than twice as likely to be renting. Of those renting, about a quarter were renting privately.

Table 3.10a. Home ownership and housing problems, Understanding Society 2018

	Ethnic Group %*									
	White			Black			Asian			BAME Combined
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Tenure of home										
Owned outright	45	49	47	[9]	16	13	28	39	33	26
Owned with debt	31	28	29	[34]	28	30	42	38	40	36
Renting	24	23	24	[57]	56	56	30	22	26	37
Landlord (if renting)										
L. authority /council	35	36	35	[48]	[33]	38	[26]	[35]	30	38
Housing assoc./charity	31	38	34	[27]	[43]	37	[21]	[37]	28	32
Private landlord	26	20	23	[26]	[20]	22	[40]	[16]	30	24
Other	8	6	7	[0]	[4]	2	[13]	[11]	12	6

* Percentages have been estimated using sampling weights. Sex and ethnicity specific percentages are of the total number of that sex & ethnicity group. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white Missing have been omitted [1] [1]ncludes family and friends 2 Married & divorced includes the creation and dissolution of civil partnerships All results where the weighted sample size is <50 cases are enclosed in square brackets.

Table 3.10b. Home ownership weighted* sample size, Understanding Society 2018

	Ethnic Group n									
	White			Black			Asian			BAME Combined
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Tenure of home	3,606	3,793	7,399	47	80	128	117	110	228	438
Landlord (if renting)	862	884	1746	27	44	71	34	25	59	163

* Estimated using sampling weights. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white Missing have been omitted

3.3.2.4 Work and retirement

Table 3.11a explores work and retirement (sample size in Table 3.11b). Those of white ethnicity were nearly twice as likely as BAME (28% vs.15%) to have completely retired; they were also about half as likely to report not currently being in work. Being out of work was most common in those of black ethnicity (9% vs. 3% for white). Compared to other groups, Asian women were least likely to be in paid work (46%) and black women were most likely (72%).

Women of white and Asian ethnicity more commonly reported working part-time (45% and 41%, respectively) than women from the black ethnic group (28%).

Table 3.11a. Work and retirement characteristics, Understanding Society 2018

	Ethnic Group %*									
	White			Black			Asian			BAME Combined
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Retirement/work status										
Completely retired	26	30	28	[9]	12	11	16	19	18	15
In paid work	63	56	60	[78]	72	74	71	46	59	63
Unable to work	6	6	6	[3]	6	5	7	5	6	7
Not in paid work	3	2	3	[11]	8	9	6	8	7	7
Other	1	1	1	[0]	1	1	0	1	0	1
Looking after home	1	4	3	[0]	1	1	0	22	11	7
Work hours[1]										
Part-time	14	45	30	[13]	[28]	22	18	[41]	27	24
Full-time[2]	86	55	70	[87]	[72]	78	82	[59]	73	76

* Percentages have been estimated using sampling weights. Sex and ethnicity specific percentages are of the total number of that sex & ethnicity group. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white Missing have been omitted [1] For those in paid work with data [2] Full-time was classified as ≥30 hours per week All results where the weighted sample size is <50 cases are enclosed in square brackets.

Table 3.11b. Work and retirement characteristic weighted* sample size, Understanding Society 2018

	Ethnic Group n									
	White			Black			Asian			BAME Combined
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Retirement/work status	3676	3894	7570	49	83	132	121	113	233	454
Work hours[1]	1,493	1,048	2,541	27	38	65	50	23	72	219

* Estimated using sampling weights. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white Missing have been omitted [1] For those in paid work with data

3.3.2.5 Caring responsibilities

Nearly one third of people reported caring for an ill/frail relative or friend (Table 3.12a with sample size in Table 3.12b). Women more frequently took on a caring role (32% vs 23% for men). Those of white ethnicity were more likely to report caring duties than other groups (29% vs 18%). Unlike ELSA, Understanding Society did not capture data on caring for grandchildren. It did, however, record the amount of time people spent caring for friends and/or relatives in a typical week. For those with a caring role, nearly four in five were caring for 20 or more hours per week.

Table 3.12a. Caring, Understanding Society 2018

	Ethnic Group %*									
	White			Black			Asian			BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	Combined
Caring for relative/friend										
No	76	67	71	[82]	78	79	88	78	83	82
Yes	24	33	29	[18]	22	21	12	22	17	18
Caring 20+ hours/wk [1]										
No	82	79	80	[82]	[70]	[73]	[77]	[62]	[67]	67
Yes	18	21	20	[18]	[30]	[27]	[23]	[38]	[33]	33

* Percentages have been estimated using sampling weights. Sex and ethnicity specific percentages are of the total number of that sex & ethnicity group. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white Missing have been omitted [1] Of those caring. All results where the weighted sample size is <50 cases are enclosed in square brackets.

Table 3.12b. Caring weighted* sample size, Understanding Society 2018

	Ethnic Group n									
	White			Black			Asian			BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	Combined
Caring for relative/friend	3,071	3,282	6,352	35	68	103	111	100	211	381
Caring 20+ hours/wk[1]	732	1092	1824	6	16	22	13	23	36	434

*Estimated using sampling weights. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white Missing have been omitted [1] Of those caring

3.3.2.6 The intersection between work and caring

Due to the small sample-size, the exploration of the intersectionality between work and caring is presented for men and women combined (Table 3.13a with sample size in Table 3.13b). People from BAME were less likely to report a caring role if in work than those of white ethnicity. BAME were also less likely than their white co-workers to be employed part-time.

Table 3.13a. The intersection between work and caring, Understanding Society 2018

	Ethnic Group %*			
	White	**Black**	**Asian**	**BAME**
Completely retired				
No caring duties	70	[66]	[69]	[70]
Caring duties	30	[34]	[31]	[30]
In paid work				
No caring duties	74	79	89	84
Caring duties	26	21	11	16
Permanently unable to work				
No caring duties	66	[100]	[94]	[97]
Caring duties	34	[0]	[6]	[3]
Not currently in paid work				
No caring duties	67	[81]	[71]	[78]
Caring duties	33	[19]	[29]	[22]
Looking after home/family & other				
No caring duties	48	[78]	[73]	[70]
Caring duties	52	[22]	[27]	[30]

* Percentages have been estimated using sampling weights. Sex and ethnicity specific percentages are of the total number of that sex & ethnicity group. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white. All results where the weighted sample size is <50 cases are enclosed in square brackets.

Table 3.13b. The intersection between work and caring weighted* sample size, Understanding Society 2018

	Ethnic Group n			
	White	**Black**	**Asian**	**BAME**
Completely retired	1,736	8	34	52
In paid work	3,928	80	127	251
Permanently unable to work	279	4	10	19
Not currently in paid work	134	10	13	27
Looking after home/family/other	274	2	26	32

* Estimated using sampling weights. is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white. Missing have been omitted

3.3.2.7 Geographical Characteristics

Table 3.14a summarises geographical characteristics (sample size in Table 3.14b). There were substantial differences in geographical distribution by ethnic group. Very few people from BAME lived in rural areas (5% vs. 25% for white); most lived in large cities, such as London and Birmingham. They were also more likely to live in highly deprived neighbourhoods than those of white ethnicity (26% vs. 16%).

Table 3.14a. Geographical characteristics, Understanding Society 2018

	Ethnic Group %*									
	White			Black			Asian			All BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Region										
North East	6	6	6	0	0	0	1	2	1	1
North West	14	14	14	6	5	6	9	8	8	7
Yorkshire & Humber	11	11	11	10	5	7	6	8	7	8
East Midlands	10	9	9	4	1	2	9	8	8	5
West Midlands	10	10	10	13	3	7	11	11	11	9
East of England	12	12	12	6	7	7	5	11	8	8
London	10	9	10	50	68	61	48	41	45	47
South East	17	17	17	8	7	7	9	10	10	9
South West	12	11	12	3	3	3	2	2	2	5
Urban/rural										
Urban	75	75	75	99	96	97	97	93	95	95
Rural	25	25	25	1	4	3	3	7	5	5
IMD [1]										
Least deprived	23	23	23	5	11	9	15	11	13	13
2	22	24	23	8	8	8	13	25	19	15
3	21	20	21	16	16	16	19	15	17	17
4	17	18	17	37	34	35	27	23	25	29
Most deprived	17	15	16	33	30	31	27	25	26	26

* Percentages have been estimated using sampling weights. Sex and ethnicity specific percentages are of the total number of that sex & ethnicity group. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling BAME include black and Asian and all other people identifying as non-white.[1] Index of multiple deprivation quintiles: least to most deprived by ONS lower layer super output area

Table 3.14b. Geographical characteristic weighted* sample size, Understanding Society 2018

	Ethnic Group n									
	White			Black			Asian			BAME Combined
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Region	3674	3896	7571	50	84	133	122	113	234	456
Urban/rural	3,676	3,896	7,571	51	83	133	121	113	235	457
IMD [1]	3676	3896	7572	50	83	133	121	113	234	457

* Estimated using sampling weights. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white Missing have been omitted [1]Index of multiple deprivation quintiles: least to most deprived by ONS lower layer super output area

3.4 Summary of findings

3.4.1 ELSA

In this nationally representative sample of older people in England, 52% of individuals in their 50s and 60s were female and the average age was 60 years. Around one in ten people self-identified as non-white. Nearly 20% of people lived alone, one in ten had never married, and one in twenty were widowed.

About a third of people had no educational qualifications or highest attainment below 0-level standard.

The poorest group (bottom 20%) of people had less than £150/week net income to live on compared to >£1000 enjoyed by the richest group (top 20%). Women tended to be approximately ten percent worse off than men with respect to net income. There was huge wealth inequality, with the poorest group of people (bottom 20%) being, on average, two hundred times less wealthy than the richest (top 20%).

Some 20% of people did not own a home and were renting, of which one in five were doing so privately. Those of non-white ethnicity were nearly half as likely to own their home outright compared to people in the white ethnic group.

Retirement status varied by ethnic group, with just over one sixth of those from the non-white groups having retired compared to one third in the white group. This was despite the groups being of similar age. One in twenty people were permanently so unwell that they were unable to work.

Just under half of people in their 50s and 60s reported caring for ill/frail relatives or friends or looking after grandchildren.

Those in the non-white group were around sixty percent more likely to live in highly deprived areas compared to those of white ethnicity. Whilst over a quarter of those in the white ethnic group lived in rural areas, only around one in thirty non-white people did.

3.4.2 Understanding Society

We found evidence of marked inequality amongst people approaching later life (50-69 years) in England.

The poorest households (bottom 20%) were living on an average of ~£200/week of net adjusted income, whilst the richest (top 20%) had more than £1000 at their disposal. Mean net weekly income was £100 lower for those of black ethnicity compared to white. This was despite those in the black ethnic group being more likely to hold a post A-level qualification than those of white ethnicity.

BAME were much less likely to own their own home outright and were more likely to be renting than people in the white ethnic group. This disparity was most evident for those of black ethnicity, who were more than three time less likely to own their home outright and twice as likely to be renting.

People from BAME were approximately twice as likely not to be in paid work and half as likely to have retired compared to the white ethnic group. Being out of work was most common in those of black ethnicity, where around 1 in 10 people were unemployed. Less than half of Asian women were in paid work. Those from BAME were less likely to experience high job satisfaction than their white colleagues, with black men reporting the lowest levels.

There were substantial differences in the types of areas people live based on their ethnicity. Compared to the white group, fewer people from BAME lived in rural areas and they were more likely to live in highly deprived neighbourhoods.

3.5 References

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4 Identifying those at risk of missing-out on a good later life and why

4.1 Research Question

The second component of the project explored the question, "Within this group, who is at risk of missing-out on a good later life and why?"

Section 4.2 describes research methods. A descriptive analysis of variables identified for inclusion in each dimension of a good later life for ELSA (Section 4.3) and Understanding Society (Section 4.4) are reported. Next, analyses undertaken after the generation of binary summary variables for each CfAB dimension are presented (Section 4.5 for ELSA and 4.6 for Understanding Society). These variables classify people by their risk of missing-out on a good later life due to their characteristics within that dimension.

For each dataset, initial descriptive analysis of the distribution of variables in each population is reported by gender and age (Section 4.5.1/4.6.1). Subsequent sections summarise the results of regression modelling.

First, the relationship between each individual CfAB dimension variable and outcome of interest (4.5.2/4.6.2) is explored. Then the relationship between a summary measure of risk across all CfAB dimensions (4.5.3/4.6.3) and each outcome is reported. Findings are summarised in Section 4.7.

4.2 Methods

For each CfAB dimension (Figure 1.1), relevant metrics captured in ELSA and Understanding Society were identified (Table 4.1a). Appendix A provides definitions and coding. Dimensions explored comprise: fulfilling work, safe and accessible housing, good health, work and health, healthy ageing, social connections, meaning and purpose (ELSA only), financial security, affordability, connected communities (Understanding Society only) and inclusive planning and design (ELSA only).

Table 4.1a ELSA and Understanding Society variables included in each CfAB dimension of a good later life (continues)

Dimension of a good later life	ELSA	Understanding Society
	Variables captured and their categorisation	
Fulfilling work	-*Effort/reward imbalance (no, yes)* -*Lack of control at work (no, yes)* -*Excessive work demand (no, yes)* -*Low job satisfaction (no, yes)*	-Work satisfaction (low, medium, high)
Safe and accessible housing	-*Housing problems (none, any)* -Problem type (if any): noisy (neighbours, street), lack of space, condensation, damp, cold, pollution, water leaks, pests, other	-*Housing problems from traffic/industry (no, yes)*
Good Health	-*Self-rated health (fair/poor, good+)* -*Limited long-standing illness (no, yes)* -Major long-term health condition (none, one, two) Sight or hearing impairment (none, sight, hearing, both)	-*Self-rated health (fair/poor vs. good+)* -*Limiting long-standing illness (no, yes)* -Major long-term health conditions (none, one, two, Sight or hearing impairment (none, sight, hearing, both)
Work and health	-*Heavy manual work (no, yes)* -*Health limits work (no, yes)*	-*Long-term sickness/ill-health (no,yes)*
Healthy ageing	-*Cognitive recall (10+ words, <10 words (impaired))* -*Daily alcohol consumption (no, yes)* -*Physical activity (active, inactive)*	-*Smoking (no, yes)-is this ever/never or current* -*Inactivity (no, yes)* -*Heavy alcohol use (no, yes)* -*Fruit and veg intake (>2, ≥2 portions)*

Binary variables are shown *in italics.*

Table 4.1a. ELSA and Understanding Society variables included in each CfAB dimension of a good later life (continued)

Dimension of a good later life	ELSA	Understanding Society
Social connections	Relationships (none, poor or good) for: -Partner, -Children, -Close relatives & -Friends *-Clubs/society/organisation membership (no, yes)* *-Volunteering (no, yes)*	*-Relationship with partner (good, poor)* *-Lack of societal engagement (no, yes)* *-Socially isolated (no, yes)* *-No close friends (no, yes)* *-Barriers to seeing friends (no, yes)*
Meaning and purpose	*-Life has meaning (not often/never vs. sometimes+)* *-Look forward to each day (≤not often vs. sometimes+)*	Relevant variables not captured
Financial security	Net wealth (quintiles) Net Income (quintiles) *Enough money to meet future needs unlikely (no, yes)*	-Tenure of home (outright, debt, renting) -Net income (quintiles) *-Not managing financially (no, yes)*
Affordability	*-Not enough money for food (never, yes)* (ever in the last 12 months) *-Not enough money for needs (no, yes)*	*-Behind with bills & housing costs (no, yes)*
Connected communities	Relevant variables not captured	*-Attacked or feared attack in last year (no, yes)* *-Lack of social cohesion (no, yes)* *-Muggings/racial attacks common (no, yes)* *-Antisocial behaviour common (no, yes)*
Inclusive planning and design	*Access to suitable transport when needed (no, yes)*	Relevant variables not captured

Binary variables are shown *in italics.*

The prevalence of individual metrics are presented (weighted %, n) both for ELSA (Section 4.3) and Understanding Society (Section 4.4). Results were stratified by age group (50-59, 60-69 years) and sex in ELSA and by ethnic group and sex in Understanding Society (as described in Section 3.2). Ethnicity was grouped as white, black, Asian and all BAME. The BAME group included not only those of black and Asian ethnicity, but also all other people identifying as non-white. All weighted results based on a weight sample size of <50 cases are presented in square brackets.

For each CfAB dimension, a binary variable (0, 1) was generated, using variables within that dimension to create a summary measure. Each of these summary variables classified individuals as being either at risk or not of missing-out of a good later life due to that dimension. Details of variable coding can be found in Appendix B.

For both ELSA (Section 4.5) and Understanding Society (Section 4.6), these variables were then the focus of the subsequent analysis.

The prevalence of these binary dimension variables is presented (Section 4.5.1 ELSA and Section 4.6.1 Understanding Society). The relationship between each binary dimension variable and each outcome were then individually explored (ELSA Section 4.5.2 and Understanding Society Section 4.6.2) using linear/logistic regression as appropriate. Each regression model was adjusted for current age and sex. Estimates used sampling weights to aid extrapolation of findings to population level. The need for any interaction terms was explored (ethnicity, age and sex).

Outcomes included disability (ELSA only), pain and depression as well as loneliness, lack of companionship, ONS-wellbeing and life satisfaction. The definition of these outcomes are provided in Table 4.1b.

Definition of a good later life risk groups

All binary dimension variables (petals) were modelled using Latent Class Analysis to categorize people based on their risk of missing out on a Good later life. Latent Class Analysis is a statistical method for identifying class membership among subjects using several characteristics. The probability of an individual belonging to each class was then used to assign individuals to the most appropriate risk group (the one they had the greatest probability of belonging to). The result of this modelling is a summary variable that groups individuals into the following categories: No/low risk; Medium risk and High risk.

Table 4.1b. ELSA and Understanding Society outcome variables

Outcome	ELSA	Understanding Society
Disability	*Disability (no, yes)* Activities of daily living (ADLs) and instrumental ADLs were combined -Those who could not do 2+ were classified as having a disability	Not captured in those <65 years of age
Pain	*Pain (yes, no)* Often troubled by pain	*Pain (moderately+ vs. no/a little)* Whether pain has interfered with work in last 4wks
Depression	CES-D 8* (additive score, 2 reverse coded) If scores 3+ then classified as depressed	Depression (discrete continuous) GHQ-12
Loneliness	*Loneliness (sometimes+ vs. hardly ever/never)*	*Loneliness (sometimes+ vs. hardly ever/never)*
Lack of companionship	*Lack of companionship (sometimes+ vs. hardly ever/never)*	-
ONS-wellbeing	ONS-wellbeing 4 questions with 4 part likert scale, combined score	-
Life satisfaction	*Life satisfaction (no, yes)* Score <7 out of 10 for response to the question "Overall how satisfied do you feel with life these days?"	-

* Eight-Item Centre for Epidemiologic Studies Depression Scale

4.3 Results: variables identified in ELSA for each CfAB dimension of a good later life

4.3.1 Introduction

Variables identified for each CfAB dimension of a good later life in ELSA Wave 9 are described (sections 4.3.2-4.3.11).

4.3.2 Fulfilling work

Of the 3,511 people in the sample, 1,860 were still working, of which 1,585 responded to questions regarding their jobs (Table 4.2a and sample size in Table 4.2b).

Approximately a third of people reported an effort/reward imbalance. There was no evidence of difference in this by gender or age group. A similar proportion reported a lack of control over their work. More than half of people felt it was too demanding. This was more common for people in their 50s than their 60s (55% men and 56% women aged 50-59 vs. 41% men and 53% women aged 60-69, $p<0.01$). Low job satisfaction was reported by 12% of men and women aged 50-69 years. It was slightly more common amongst men and women in their 50s compared to those in their 60s, but did not vary by gender. There was no evidence that variables in the dimension of fulfilling work differed by ethnic group.

Table 4.2a. Fulfilling work, ELSA 2018

	Age Group (years) %*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Effort/reward imbalance								
No	66	66	69	64	67	65	0.7	66
Yes	34	34	31	36	33	35		34
Lack of control at work								
No	66	62	75	68	70	64	0.1	67
Yes	34	38	25	32	30	36		33
Excessive work demand								
No	45	43	59	47	51	45	0.06	48
Yes	55	57	41	53	49	55		52
Low job satisfaction								
No	86	90	[88]	[89]	87	89	0.5	88
Yes	14	10	[12]	[11]	13	11		12

* Percentages are estimated using sampling weights & Sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified. All results where the weighted sample size is <50 cases are enclosed in square brackets.

Table 4.2b. Fulfilling work weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Effort/reward imbalance	402	519	347	317	749	836	1585
Lack of control at work	402	519	346	314	748	833	1581
Excessive work demand	402	519	345	315	747	834	1581
Low job satisfaction	54	68	[37]	[29]	91	97	188

* Numbers are estimated using sampling weights . All results where the weighted sample size is <50 cases are enclosed in square brackets.

4.3.3 Safe and accessible housing

Table 4.3a summarises housing problems (sample size Table 4.3b).

Over a third of people in ELSA, aged 50-69 years reported at least one type of housing problem. Excessive noise was the most common issue, with nearly one in ten people being disturbed by neighbours and a similar proportion affect by noise from the street. Lack of space, excess condensation, damp, cold and pollution were also commonly encountered. Age and gender differences were not evident. These problems appeared more common in the non-white group (42% vs. 34% for white), however the statistical evidence for this was weak (p=0.1).

Table 4.3a. Safe & accessible housing, ELSA 2018

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Housing problems								
None	66	62	66	68	66	65	0.8	65
Any	34	38	34	32	34	35		35
Problem type[2]								
Noisy neighbours	10	11	8	8	9	9	0.9	9
Noise from street	9	9	11	8	10	9	0.2	10
Lack of space	8	10	8	7	8	9	0.7	8
Excess condensation	9	6	3	5	6	5	0.5	5
Damp	5	5	4	5	5	5	0.4	5
Cold	5	7	7	6	6	6	0.6	6
Pollution	4	4	4	4	4	4	0.5	4
Water leaks	2	4	2	3	2	4	0.3	3
Pests	4	4	3	4	4	4	0.7	4
Other[3]	4	2	2	2	2	2	0.06	2

* Percentages have been estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified [2] Of those reporting any housing problems [3] Other problems comprise: electrical, plumbing, too dark, rot or other (more than one may be present simultaneously)

Table 4.3b. Safe & accessible housing weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Housing problems	728	809	971	1051	1699	1860	3559

* Numbers have been estimated using sample weights [1] Of those reporting any housing problems [2] Other problems comprise: electrical, plumbing, too dark, rot or other (more than one may be present simultaneously)

4.3.4 Good health

Table 4.4a reports health characteristics by age and gender (sample size in Table 4.4b).

Just under a quarter of people reported being in poor or fair health. There was little evidence that self-reported health differed by gender, ethnic group or age group.

Limiting long-standing illness was more common in men and women aged 60-69 years (31% and 33% respectively) than in men and women aged 50-59 years (20% and 26%).

Complex multi-morbidity (two or more major long-term health conditions) was common (44% of people overall). This occurred more frequently in men and women aged 60-69 years (54% and 56% respectively) than in men and women aged 50-59 years (38% and 30%).

The likelihood of hearing impairment increased with age and was more common in men than women (aged 50-69: 15% vs. 9%, $p<0.001$). There was no evidence visual impairment differed by gender or age group.

Table 4.4a. Good health, ELSA 2018

	Age Group (years) %*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Self-rated health								
(Very) good/excellent	80	78	74	76	76	77	0.7	77
Fair or poor	20	22	26	24	24	23		23
Limiting long-standing illness								
No	80	74	69	67	75	71	0.06	73
Yes	20	26	31	33	25	29		27
Major long-term health conditions[2]								
None	39	42	27	21	35	33	0.07	34
One	23	28	19	23	20	24		22
Two	38	30	54	56	45	43		44
Sight or hearing impairment								
None	80	81	70	80	76	81	<0.001	79
Sight	7	8	6	7	6	7		7
Hearing	11	9	19	10	15	9		12
Both hearing and sight	2	2	5	3	3	2		3

* Percentages are estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified [2] includes cardiovascular disease, mental illness, arthritis, cancer, asthma, neurological conditions, diabetes, high cholesterol & blood pressure

Table 4.4b. Good health weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Self-rated health	573	792	935	1210	1508	2002	3510
Limiting long-standing illness	573	792	935	1210	1579	2064	3643
Major long-term health conditions[2]	573	792	935	1211	1579	2065	3644
Sight or hearing impairment	573	792	935	1211	1579	2065	3644

* Numbers are estimated using sampling weights [2] includes cardiovascular disease, mental illness, arthritis, cancer, asthma, neurological conditions, diabetes, high cholesterol & blood pressure

4.3.5 Work and health

For both men and women aged 50-69 years combined, three in ten people working reported undertaking heavy manual work (Table 4.5a and sample size in Table 4.5b). This did not vary by age group, but was more common in men than women (36% vs. 25%, $p<0.001$). Those from BAME were less likely to undertake heavy manual work (men and women aged 50-69: 14% vs. 32% for white, $p<0.01$).

A little over 20% of people had a limited capacity to work due to ill health, with this being more common in men and women in their 60s than 50s (26% in men and women aged 60-69 vs 15% and 21% in men and women aged 50-59 respectively). There was no evidence that the impact of health on work differed by gender or ethnic group.

Table 4.5a. Work and health, ELSA 2018

	Age Group (years) %*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Heavy manual work[2]								
No	66	76	61	75	64	75	<0.001	69
Yes	34	24	39	25	36	25		31
Health limits work								
No	85	79	74	74	79	76	0.2	77
Yes	15	21	26	26	21	24		23

* Percentages are estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified. [2]if working

Table 4.5b. Work and health weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Heavy manual work[2]	479	637	401	368	880	1005	1885
Health limits work	573	792	934	1210	1507	2002	3509

* Numbers are estimated using sampling weights [2]of those in work

4.3.6 Healthy ageing

Table 4.6a summarises components of healthy ageing explored (sample size in Table 4.6b). Cognitive testing classified 23% of men and women aged 50-69 years as having poor memory. This was more common in men than women when examining all ages combined (27% vs. 20%, $p<0.001$). The prevalence of men and women reporting poor memory increased with age (23% in men and 17% in women aged 50-69 vs. 30% in men and 22% in women aged 60-69, $p<0.01$) and was more common in those in the non-white group (31% vs. 21% for white, $p<0.001$).

People in the non-white group aged 50-69 years were less likely to have ever smoked compared to those in the white ethnic group (43% vs 61%, $p<0.01$). Among those aged 50-69, daily alcohol consumption use was more common in men than women (20% vs. 12%, $p<0.001$). The prevalence of men and women consuming alcohol daily increased with age, with 14% of people in their 50s drinking heavily compared to 17% of people in their 60s ($p<0.05$).

Overall 13% of men and women aged 50-69 years were physically inactive. Women of all ages were more likely to be physically inactive than men. Levels of physical inactivity were also higher in men and women aged in their 60s when compared to men and women aged 50-69. Activity levels did not differ by ethnic group.

Table 4.6a. Healthy ageing, ELSA 2018

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Cognitive function								
good memory (≥10 words)	77	83	70	78	73	80	<0.01	77
poor memory (<10 words)	23	17	30	22	27	20		23
Smoking								
Current	18	15	15	15	16	15	0.3	15
Former	30	33	50	43	41	39		40
Never	53	52	35	42	43	46		45
Daily alcohol consumption								
No	83	89	78	88	80	88	<0.001	84
Yes	17	11	22	12	20	12		16
Physical activity								
Active	91	88	86	83	88	86	0.07	87
Inactive	9	12	14	17	12	14		13

* Percentages are estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified

Table 4.6b. Healthy ageing weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Cognitive recall	571	790	932	1205	1503	1995	3498
Smoking	571	788	919	1194	1490	1982	3472
Daily alcohol	494	670	874	1128	1368	1798	3166
Physical activity	573	792	935	1211	1579	2065	3644

* Numbers are estimated using sampling weights

4.3.7 Social connections

This section summarises the types of social connections people had and their quality. This included relationships with partners, children, friends and relatives. Organisational membership and volunteering were also explored.

4.3.7.1 Relationships

Relationships are summarised in Table 4.7a (sample size in Table 4.7b). Men were more likely to have a partner with whom they report a good relationship than women. However, men were less likely to identify positive relationships with their children, other family members or friends. Nearly one in ten men had no friends. People in their 60s report better relationships with their children than people in their 50s did.

Table 4.7a. Social connections: relationships, ELSA 2018

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Partner								
Has no partner	23	31	21	31	21	31	<0.001	26
Poor relationship[2]	10	10	11	12	11	12		12
Good relationship	67	59	69	57	68	57		62
Children								
Has no children	17	13	20	12	19	12	<0.001	15
Poor relationship [2]	28	21	19	16	23	19		21
Good relationship	55	65	61	72	58	68		63
Close relatives								
Has no relatives	2	4	6	6	4	5	<0.001	5
Poor relationship [2]	42	33	40	34	41	34		38
Good relationship	55	63	54	60	54	61		58
Friends								
Has no friends	9	5	9	5	9	5	<0.001	7
Poor relationship [2]	31	17	25	18	28	18		23
Good relationship	61	78	65	77	63	77		70

* Percentages estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified [2] Either the relationship has many negatives (partner perceived as: critical, unreliable, irritating or demanding) or few positives (not very: understanding, reliable if serious problem or there to open up to).

Table 4.7b. Social connections: relationships weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Partner	493	673	875	1127	1439	1862	3301
Children	493	673	874	1131	1438	1866	3304
Close relatives	493	673	870	1131	1434	1866	3300
Friends	493	671	870	1132	1434	1865	3299

* Numbers are estimated using sampling weights [1]Either the relationship has many negatives (partner perceived as: critical, unreliable, irritating or demanding) or few positives (not very: understanding, reliable if serious problem or there to open up to).

4.3.7.2 Organisational membership and volunteering

Membership and volunteering are summarised in Table 4.8a (sample size in Table 4.8b). Over 60% of men and women of all ages combined reported being members of an organisation, club or society. Volunteering was common in both sexes with 44% of men and women aged 50-69 years reporting engaging in volunteering activities.

There was no evidence that society/organisation membership or volunteering varied by gender, age group or ethnic group.

Table 4.8a. Social connections: membership and volunteering, ELSA 2018

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Club/society/organisation member								
No	31	40	32	32	32	35	0.4	33
Yes	69	60	68	68	68	65		67
Volunteering								
Yes	53	52	57	60	55	56	0.1	56
No	47	48	43	40	45	44		44

*Percentages are estimated using sampling weight, sex-specific & percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified

Table 4.8b. Social connections: membership and volunteering weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Club/society/ organisation member	482	659	849	1083	1331	1742	3073
Volunteering	569	789	934	1207	1503	1996	3499

*Numbers are estimated using sampling weights

4.3.8 Meaning and purpose

Meaning and purpose are summarised in Table 4.9a (sample size in Table 4.9b). Amongst men and women aged 50-69 years, nearly one in ten reported that their lives rarely had meaning. In addition, 7% reported that they seldom or never look forward to each day. Responses did not differ by ethnic group with respect to meaning or purpose, but more people from the non-white group reported low levels of life satisfaction (40% vs. 26% for white, $p<0.05$).

Table 4.9a. Meaning & purpose, ELSA 2018

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Life has meaning								
Often/sometimes	89	90	91	92	90	91		91
Not often/never	11	10	9	8	10	9	0.08	9
Look forward to each day								
Often/sometimes	91	93	94	93	93	93		93
Not often/never	9	7	6	7	7	7	0.8	7

* Percentages are estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified

Table 4.9b. Meaning & purpose weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Life has meaning	489	673	872	1129	1361	1802	3163
Look forward to each day	490	672	872	1130	1362	1802	3164

* Numbers are estimated using sampling weights

4.3.9 Financial security

Financial security with respect to wealth and income have already been described in Section 3.3.1.2. Table 4.10a provides information about how likely people felt it was that they would be able to meet future financial needs (sample size in Table 4.10b).

Amongst men and women aged 50-69 years, 18% thought that they would not have enough resources to meet their needs in the future. Responses did not vary by gender, but men and women aged 50-59 years more commonly thought resources would be insufficient (18% for men and 20% for women) than men and women aged 60-69 years (16% and17%, respectively).

Those from the non-white group reported more challenges with perceived future financial security.

Table 4.10a. Financial security, ELSA 2018

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	
Enough money for future needs unlikely								
No	82	80	84	83	83	82	0.3	82
Yes	18	20	16	17	17	18		18

* Percentages and means have been estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted 1 χ2-test unless otherwise specified. 2 Net wealth 3 Weekly net income per benefit unit

Table 4.10b. Financial security weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Unlikely to meet future financial needs	561	776	924	1194	1485	1970	3455

*Numbers are estimated using sampling weights

4.3.10 Affordability

Affordability is summarised in Table 4.11a (sample size in Table 4.11b). Around 3% of men and women in their 50s and 60s reported not having had enough money for food at some point in the last 12 months. Overall, 7% of people reported insufficient money to meet their current needs. Responses did not vary by gender, but men and women aged 50-59 years were more likely than those aged 60-69 to have struggled in this way.

Having insufficient money for food (8% vs. 2% for white, p<0.001) or to meet needs (16% vs. 6% for white, p<0.001) was much more common for those in the non-white group.

Table 4.11a. Affordability, ELSA 2018

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Not enough money for food[2]								
No	96	96	97	98	97	97	0.4	97
Yes	4	4	3	2	3	3		3
Not enough money for needs[2]								
No	92	90	95	95	93	93	0.4	93
Yes	8	10	5	5	7	7		7

* Percentages and means have been estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted 1 χ2-test unless otherwise specified. 2 At any point in the last 12 months

Table 4.11b. Affordability weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Not enough money for food in last 12 months	571	792	933	1210	1504	2002	3506
Not enough money to meet needs	572	790	932	1208	1504	1998	3502

*Numbers are estimated using sampling weights

4.3.11 Inclusive planning and design

Inclusive planning and design is summarised in Table 4.12a (sample size in Table 4.12b). Barriers to suitable transport were used to explore the lack of inclusive planning and design, as these were the most suitable variables available.

In total, 7% of people report that they did not have access to suitable transport when needed. This was defined as either access to a car (with driver if required) or access to daily public transport. Women reported more difficulties accessing transport than men. There was no evidence barriers differed by ethnic group.

Table 4.12a. Inclusive planning and design, ELSA 2018

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Access to suitable transport when needed								
Yes	95	91	95	93	95	93	<0.05	93
No	5	9	5	7	5	7		7

* Percentages are estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified

Table 4.12b. Inclusive planning and design weighted sample size, ELSA 2018

	Age Group (years)/n*						
	50-59		60-69		50-69		
	Male	Female	Male	Female	Male	Female	All
Access to suitable transport when needed	573	792	935	1211	1508	2003	3511

* Numbers are estimated using sampling weights

4.4 Results: variables identified in Understanding Society for each CfAB dimension of a good later life

4.4.1 Introduction

Variables identified for each CfAB dimension of a good later life in Understanding Society Wave 9 are described (sections 4.4.2-4.4.10).

4.4.2 Fulfilling work

Fulfilling work is summarised in Table 4.13a (weighted sample size in Table 4.13b). How fulfilling people found their work varied by ethnicity. People from BAME were less likely to report high job satisfaction compared to those of white ethnicity (60% vs. 52%). Black men reported the lowest levels of satisfaction (41%).

Table 4.13a. Fulfilling work, Understanding Society 2018

	Ethnic Group %*									
	White			Black			Asian			BAME Combined
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Work satisfaction [1]										
Low	13	12	12	[12]	[12]	[12]	[5]	[13]	[8]	[11]
Medium	30	26	28	[47]	[36]	[40]	[45]	[28]	[38]	37
High	58	62	60	[41]	[52]	[48]	[50]	[59]	54	52

*Sex and ethnicity specific percentages are of the total number of that sex & ethnicity group. Numbers have been estimated using sample weights. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. Missing have been omitted BAME include black and Asian and all other people identifying as non-white [1] For those in paid work with data [2] Full-time was classified as ≥30 hours per week . All results where the weighted sample size is <50 cases are enclosed in square brackets.

Table 4.13b. Fulfilling work weighted sample size, Understanding Society 2018

	Ethnic Group n									
	White			Black			Asian			BAME Combined
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Work satisfaction[1]	**2318**	**2201**	**4518**	**38**	**58**	**97**	**81**	**47**	**128**	**274**
Low	299	258	556	[4]	[7]	[12]	[4]	[6]	[10]	[29]
Medium	686	580	1,266	[18]	[21]	[39]	[36]	[13]	[49]	102
High	1,333	1,363	2,696	[16]	[30]	[46]	[41]	[28]	69	143

Numbers have been estimated using sample weights. *There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white Missing have been omitted [2] For those in paid work with data [3] Full-time was classified as ≥30 hours per week . All results where the weighted sample size is <50 cases are enclosed in square brackets.

4.4.3 Safe and accessible housing

Data on safe and accessible housing were limited in Wave 9 of Understanding Society. However, one survey question asked respondents whether pollution or grime from traffic or industry caused problems for them. Table 4.14a summaries these findings (sample size in Table 4.14b). Those from BAME, especially those of black ethnicity (21%), were more likely than those from the white group (19% vs. 14%) to report these problems.

Table 4.14a. Safe and accessible housing, Understanding Society 2018

	Ethnic Group/%*									
	White			Black			Asian			All BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Housing problems from traffic/industry [1]										
No	85	86	86	[84]	75	79	82	83	83	81
Yes	15	14	14	[16]	25	21	18	17	17	19

* Percentages have been estimated using sampling weight There is occasional apparent lack of agreement between n's and % when numbers are small due to the n's being to the nearest whole number and the % being calculated using n's to two decimal places. Missing have been omitted BAME include black and Asian and all other people identifying as non-white [1] Pollution/grime other environmental problems. All results where the weighted sample size is <50 cases are enclosed in square brackets.

Table 4.14b. Safe and accessible housing weighted sample size, Understanding Society 2018

	Ethnic Group/n*									
	White			Black			Asian			All BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Housing problems due to traffic/industry [1]										
	3,613	3,799	7,413	[48]	80	127	118	109	227	436

* Numbers have been estimated using sampling weights & are of the total weighted number of that sex & ethnicity group There is occasional apparent lack of agreement between n's and % when numbers are small due to the n's being to the nearest whole number and the % being calculated using n's to two decimal places. BAME include black and Asian and all other people identifying as non-white [1] Pollution/grime other environmental problems. All results where the weighted sample size is <50 cases are enclosed in square brackets.

4.4.4 Good health

Table 4.15a summarises health by ethnic group (sample size in Table 4.15b). Those of Asian ethnicity were most likely to report poor health and those of black ethnicity (32% vs. 23%) least likely.

Across all ethnic groups, just under half of people reported a limiting longstanding illness and 20% at least one comorbidity (e.g. diabetes mellitus, cardiovascular disease and cancer).

Major sight and/or hearing impairment affected 6% of people; there was little evidence that this varied by ethnic group.

Table 4.15a. Good health, Understanding Society 2018

	Ethnic Group/%*									
	White			Black			Asian			BAME Combined
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Self-rated health										
Good	74	73	73	[84]	72	77	70	66	68	72
Poor	26	27	27	[16]	28	23	30	34	32	28
Limiting long-standing illness										
No	56	54	55	[71]	53	60	62	55	59	56
Yes	44	46	45	[29]	47	40	38	45	41	44
Comorbidities										
None	82	80	81	80	82	81	78	77	77	79
1	13	15	14	18	14	15	19	14	16	15
2	3	3	3	2	2	2	2	7	5	3
3+	2	2	2	0	2	2	2	2	2	2
Hearing/vision impairment										
None	93	94	94	97	95	95	94	92	93	94
Hearing	4	3	3	0	2	1	3	3	3	2
Vision	3	3	3	3	3	3	2	3	3	3
Both	1	0	1	0	0	0	1	2	1	1

* Percentages have been estimated using sampling weights & are of the total weighted number of that sex & ethnicity group There is occasional apparent lack of agreement between n's and % when numbers are small due to the n's being to the nearest whole number and the % being calculated using n's to two decimal places. BAME include black and Asian and all other people identifying as non-white Missing have been omitted [1]Relationship satisfaction subscale (RDAS)-7 dimension measure of couple relationship quality [2] No social or civic participation . All results where the weighted sample size is <50 cases are enclosed in square brackets.

Table 4.15b. Good health weighted sample size, Understanding Society 2018

	Ethnic Group/n*									
	White			Black			Asian			BAME Combined
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Self-rated health	3,615	3,850	7,466	[46]	74	120	111	99	211	413
Limiting long-standing illness	3,674	3,893	7,567	[49]	83	132	121	114	235	456
Comorbidities	3,676	3,896	7,571	50	83	134	121	113	235	459
Hearing/vision impairment	3,673	3,894	7,568	50	82	132	120	113	233	454

* Numbers have been estimated using sampling weights There is occasional apparent lack of agreement between n's and % when numbers are small due to the n's being to the nearest whole number and the % being calculated using n's to two decimal places. BAME include black and Asian and all other people identifying as non-white [1]Relationship satisfaction subscale (RDAS)-7 dimension measure of couple relationship quality [2] No social or civic participation

4.4.5 Work and health

Table 4.16a summarises the relationship between work and health (sample size in Table 4.16b). BAME were more likely to report that poor health limited the amount or type of work they could perform (43%), than those of white ethnicity (34%).

Table 4.16a. Work & health, Understanding Society 2018

	Ethnic Group/%*									
	White			Black			Asian			BAME Combined
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Long term sickness/ill-health [1]										
No	94	94	94	97	94	95	93	95	94	93
Yes	6	6	6	3	6	5	7	5	6	7
Health limits work [2]										
No	68	63	66	[71]	57	63	57	44	51	57
Yes	32	37	34	[29]	43	37	43	56	49	43

* Percentages have been estimated using sample weights & sex-specific percentages are of the total number of that sex by ethnicity group. Missing have been omitted [1] Unable to work long-term due to ill-health [2] Mental or physical health has limited the amount or type of work in the last 4 weeks BAME include black and Asian and all other people identifying as non-white. All results where the weighted sample size is <50 cases are enclosed in square brackets.

Table 4.16b. Work & health weighted sample size, Understanding Society 2018

	Ethnic Group/n*									
	White			Black			Asian			BAME Combined
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Long term sickness/ill-health[1]	3,676	3,894	7,570	50	83	133	121	112	234	456
Health limits work [2]	3,610	3,849	7,460	[46]	72	118	110	98	208	409

* Numbers have been estimated using sample weights [1] Unable to work long-term due to ill-health [2] Mental or physical health has limited the amount or type of work in the last 4 weeks BAME include black and Asian and all other people identifying as non-white . All results where the weighted sample size is <50 cases are enclosed in square brackets.

4.4.6 Healthy ageing

Table 4.17a summarises the frequency of various behaviours known to affect health (sample size in Table 4.17b). Current smoking was most frequently reported by those of black ethnicity and was least frequently reported by those of Asian ethnicity (9%).

Physical inactivity was common, but varied by ethnic group with over half of men and women from BAME being inactive compared approximately one third of those in the white ethnic group.

Heavy alcohol use was more common in those who identified as white compared to BAME (11% vs. 4%) and was more common in men than women.

Very few people were eating the recommended (UK government) amounts of fruit and vegetables a day, with approximately 40% of people averaging ≤2 portions per day.

Table 4.17a. Healthy ageing, Understanding Society 2018

	Ethnic Group/%*									
	White			Black			Asian			All BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Smoking										
No	85	86	85	78	82	81	86	97	91	86
Yes	15	14	15	22	18	19	14	3	9	14
Inactivity										
No	69	61	65	68	45	54	49	41	45	49
Yes	31	39	35	32	55	46	51	59	55	51
Heavy alcohol use										
No	85	93	89	95	92	93	98	99	98	96
Yes	15	7	11	5	8	7	2	1	2	4
Fruit and veg intake[1] /day										
>2 portions	53	65	60	[49]	64	59	52	53	52	58
≤2 portions	47	35	40	[51]	36	41	48	47	48	42

* Percentages have been estimated using sampling weights & are of the total weighted number of that sex & ethnicity group There is occasional apparent lack of agreement between n's and % when numbers are small due to the n's being to the nearest whole number and the % being calculated using n's to two decimal places. BAME include black and Asian and all other people identifying as non-white Missing have been omitted [1] Averaged consumption over a week . All results where the weighted sample size is <50 cases are enclosed in square brackets.

Table 4.17b. Healthy ageing weighted sample size, Understanding Society 2018

	Ethnic Group/n*									
	White			Black			Asian			All BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Smoking	3,676	3,895	7,570	50	83	133	121	114	234	456
Inactivity	3,661	3,875	7,536	50	82	132	119	112	231	452
Heavy alcohol use	3,669	3,895	7,563	50	83	133	120	114	233	455
Fruit and veg intake	3,283	3,638	6,921	[41]	80	121	112	110	222	426

* Numbers have been estimated using sampling weights There is occasional apparent lack of agreement between n's and % when numbers are small due to the n's being to the nearest whole number and the % being calculated using n's to two decimal places. BAME include black and Asian and all other people identifying as non-white. All results where the weighted sample size is <50 cases are enclosed in square brackets.

4.4.7 Social connections

Table 4.18a summarises information regarding people's social connections (sample size in Table 4.18b). Understanding Society collects information on the quality of people's relationships with their partner using the relationship satisfaction subscale (RDAS). Across BAME, 28% of people's responses indicated a poor quality relationship with their partner compared to 17% for those in the white ethnic group.

There was no evidence of a difference in level of societal engagement (social or civic) by ethnic group, with approximately half of people not participating in these activities.

Feelings of social isolation were common, with over a third of people feeling somewhat isolated. This varied by ethnic group with those from BAME more likely to report these feelings than those of white ethnicity (43% vs.35%). Asian women were most likely to experience isolation (52%).

A complete lack of close friends was reported by 3% of the white ethnic group and 4% of BAME and was more common in men than in women.

One in eight people were unable to see their friends when they would like to. Reasons for this varied and included lack of transport, fear of crime/crowds, caring responsibilities and a perception there was nowhere to go nearby. There was no evidence this differed by ethnic group.

Table 4.18a. Social connections, Understanding Society 2018

	Ethnic Group/%*									
	White			Black			Asian			BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	Combined
Relationship: partner[1]										
Good	86	80	83	[75]	[68]	71	75	65	71	72
Poor	14	20	17	[25]	[32]	29	25	35	29	28
Lack of societal engagement[2]										
No	48	47	47	49	54	52	45	37	41	45
Yes	52	53	53	51	46	48	55	63	59	55
Socially isolated										
No	67	62	65	[60]	62	61	58	48	54	57
Yes	33	38	35	[40]	38	39	42	52	46	43
No close friends										
No	96	98	97	[95]	96	96	95	98	96	96
Yes	4	2	3	[5]	4	4	5	2	4	4
Barrier to seeing friends										
No	88	89	89	89	87	88	89	87	88	88
Yes	12	11	11	11	13	12	11	13	12	12

* Percentages have been estimated using sampling weights & are of the total weighted number of that sex & ethnicity group .There is occasional apparent lack of agreement between n's and % when numbers are small due to the n's being to the nearest whole number and the % being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to intentional over-sampling. BAME include black and Asian and all other people identifying as non-white Missing have been omitted [1]Relationship satisfaction subscale (RDAS)-7 dimension measure of couple relationship quality [2] No social or civic participation . All results where the weighted sample size is <50 cases are enclosed in square brackets.

Table 4.18b. Social Connections weighted sample size, Understanding Society 2018

	Ethnic Group/n*									
	White			Black			Asian			All BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Relationship: partner[1]	2,725	2,669	5,395	[24]	[29]	53	95	73	169	267
No societal engagement[2]	3,654	3,867	7,521	50	82	132	119	111	230	451
Socially isolated	3,605	3,845	7,450	[46]	74	119	110	97	207	409
No close friends	3,516	3,811	7,326	[49]	79	127	115	107	222	436
Barrier to seeing friends	3,674	3,893	7,568	50	84	133	120	114	234	456

* Numbers have been estimated using sampling weights. There is occasional apparent lack of agreement between n's and % when numbers are small due to the n's being to the nearest whole number and the % being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to intentional over-sampling. BAME include black and Asian and all other people identifying as non-white [1]Relationship satisfaction subscale (RDAS)-7 dimension measure of couple relationship quality [2] No social or civic participation . All results where the weighted sample size is <50 cases are enclosed in square brackets.

4.4.8 Financial security

Components of financial security are summarised in Table 4.19a (sample size in Table 4.19b).

There was marked differences is home ownership by ethnic group. BAME were much less likely to own their own home outright and were more likely to be renting, than people in the white ethnic group. This disparity was most evident for those of black ethnicity, who were more than three time less likely to own their home outright and more than twice as likely to be renting.

The poorest group (bottom 20% of the income distribution) of households were living on average on around £200 of net adjusted income a week, whilst the richest group (top 20%) have on average £1000+ at their disposal. Mean net weekly income was £100 lower for those of black ethnicity compared to white. People from BAME were twice as likely as those of white ethnicity to be struggling financially, with over half of this group affected.

Table 4.19a. Financial security, Understanding Society 2018

	Ethnic Group %/Mean(SD)*									
	White			Black			Asian			All BAME
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Tenure of home										
Owned outright	45	49	47	9	16	13	28	39	33	26
Owned with debt	31	28	29	34	28	30	42	38	40	36
Renting	24	23	24	57	56	56	30	22	26	37
Net income quintiles										**Mean Income £/wk**
Lowest	18	21	20	29	30	30	27	24	26	200 (64)
2	20	20	20	24	23	23	15	19	17	327 (29)
3	20	20	20	19	17	18	21	24	22	430 (31)
4	21	20	20	14	17	16	19	14	17	559 (47)
Highest	21	19	20	14	13	13	18	18	18	1010(891)
£/wk	511	487	499	370	408	397	458	545	500	497
(SD)	(534)	(412)	(476)	(220)	(204)	(210)	(314)	(858)	(640)	(477)
Not managing financially[2]										
No	74	73	73	46	42	43	50	55	52	49
Yes	26	27	27	54	58	57	50	45	48	51

* Sex and ethnicity specific percentages are of the total number of that sex & ethnicity group. Numbers have been estimated using sample weights. There is an occasional apparent lack of agreement between the weighted n's and percentages when numbers are small due to the n's being to the nearest whole person and the percentages being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to over-sampling. BAME include black and Asian and all other people identifying as non-white Missing have been omitted [1] Finding things very difficult/difficult or just getting by (lacking financial security)

Table 4.19b. Financial security weighted sample size, Understanding Society 2018

	Ethnic Group/n*									
	White			Black			Asian			All BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Tenure of home	10,605	11,235	21,840	138	210	349	329	318	648	1,231
Net Income quintiles	4221	4516	8737	65	92	158	149	145	295	554
Not managing financially	3,673	3,894	7,567	50	83	133	120	112	232	454

* Numbers have been estimated using sample weights BAME include black and Asian and all other people identifying as non-white

4.4.9 Affordability

Affordability is summarised in Table 4.20a (sample size in Table 4.20b). Just 5% of people in the white ethnic group reported being behind with their bills/mortgage/rental payments compared to 17% from BAME.

Table 4.20a. Affordability, Understanding Society 2018

	Ethnic Group/%*									
	White			Black			Asian			All BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Behind with bills [1]										
No	94	95	95	[72]	69	70	89	88	89	83
Yes	6	5	5	[28]	31	30	11	12	11	17

* Percentages have been estimated using sample weights & sex-specific percentages are of the total number of that sex by ethnicity group. Missing have been omitted [1] This includes mortgage/rent payments & utility bill BAME include black and Asian and all other people identifying as non-white . All results where the weighted sample size is <50 cases are enclosed in square brackets.

Table 4.20b. Affordability weighted sample size, Understanding Society 2018

	Ethnic Group/n*									
	White			Black			Asian			All BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Behind with bills [1]	3,607	3,793	7,402	[47]	80	127	117	109	227	436

* Numbers have been estimated using sample weights [1] This includes mortgage/rent payments & utility bills BAME include black and Asian and all other people identifying as non-white . All results where the weighted sample size is <50 cases are enclosed in square brackets.

4.4.10 Connected communities

Table 4.21a summarises how people perceive their local area (sample size in Table 4.21b). Just 1% of those in the white ethnic group were attacked or had avoided places for fear of attack in the preceding year. In contrast, 17% of people from BAME had done so. Black women (23%) most commonly reported these experiences.

Information on social cohesion was captured in Wave 9 of Understanding Society, using the neighbourhood cohesion instrument. This measured "neighbourliness" in the local area. Approximately one in ten people experience a lack of cohesion, but this varied by ethnic group, with those of black ethnicity at the greatest risk and those of Asian ethnicity at the least (11% vs. 5%).

The perceived frequency of muggings and/or racial attacks in the local area also varied by ethnic group. Those from BAME were twice as likely as those in the white ethnic group to report that these crimes occur commonly (8% vs. 4%).

Problems with antisocial behaviour in the local area were commonly experienced (~50%), irrespective of ethnic group. These problems include graffiti, street rubbish, loitering, drunkenness, vandalism, burglary and car theft.

Table 4.21a: Connected Communities, Understanding Society 2018

	Ethnic Group/%*									
	White			Black			Asian			All BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Attacked/feared attack in last yr[1]										
No	99	99	99	89	77	81	82	84	83	83
Yes	1	1	1	11	23	19	18	16	17	17
Lack of social cohesion[2]										
No	91	92	92	[92]	87	89	94	97	95	92
Yes	9	8	8	[8]	13	11	6	3	5	8
Muggings/racial attacks common[3]										
No	96	96	96	[95]	96	95	92	94	93	92
Yes	4	4	4	[5]	4	5	8	6	7	8
Antisocial behaviour common [4]										
No	49	49	49	[50]	46	47	49	52	50	49
Yes	51	51	51	[50]	54	53	51	48	50	51

* Percentages have been estimated using sampling weights & are of the total weighted number of that sex & ethnicity group There is occasional apparent lack of agreement between n's and % when numbers are small due to the n's being to the nearest whole number and the % being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to intentional over-sampling. BAME include black and Asian and all other people identifying as non-white Missing have been omitted [1] Attacked or avoided somewhere due to fear of attack in the last year 2 Generated from the neighbourhood cohesion instrument with a cut-off of 2.6 [3]Perceived frequency in local neighbourhood [4] Includes: graffiti, street rubbish, loitering groups, drunkenness, vandalism, burglary & car theft/break-ins. . All results where the weighted sample size is <50 cases are enclosed in square brackets.

Table 4.21b: Connected Communities weighted sample size, Understanding Society 2018

	Ethnic Group/n*									
	White			Black			Asian			All BAME
	Male	Female	Combined	Male	Female	Combined	Male	Female	Combined	
Attacked/feared attack in last yr[1]	3,676	3,895	7,572	51	82	133	119	112	231	454
Lack of social cohesion[2]	3,602	3,841	7,442	[46]	73	118	110	98	208	409
Muggings/racial attacks common[3]	3,612	3,800	7,412	[48]	80	128	118	110	227	437
Antisocial behaviour common[4]	3,612	3,800	7,412	[48]	80	128	118	110	227	437

* Numbers have been estimated using sampling weights There is occasional apparent lack of agreement between n's and % when numbers are small due to the n's being to the nearest whole number and the % being calculated using n's to two decimal places. This is a product of the deflating effect of weighting on BAME numbers due to intentional over-sampling. BAME include black and Asian and all other people identifying as non-white [1] Attacked or avoided somewhere due to fear of attack in the last year [2] Generated from the neighbourhood cohesion instrument with a cut-off of 2.6 [3] Perceived frequency in local neighbourhood [4] Includes: graffiti, street rubbish, loitering groups, drunkenness, vandalism, burglary & car theft/break-ins. . All results where the weighted sample size is <50 cases are enclosed in square brackets.

4.5 Results: exploring binary CfAB dimension variables: ELSA

In Section 4.5.1, the distribution of each binary CfAB dimension variables is described by age and gender. This is followed in Section 4.5.2 by a summary of the regression analysis results, exploring the relationship between each dimension variable (considered separately) and each outcome of interest (disability, pain, depression and loneliness).

4.5.1 Gender and age distribution of those classified as at risk of missing-out by each CfAB dimension: ELSA

Figure 4.1 provides, for each CfAB dimension, the prevalence of men put at risk of missing-out on a good later life due to a lack of that dimension, by age group (50-59 and 60-69 years).

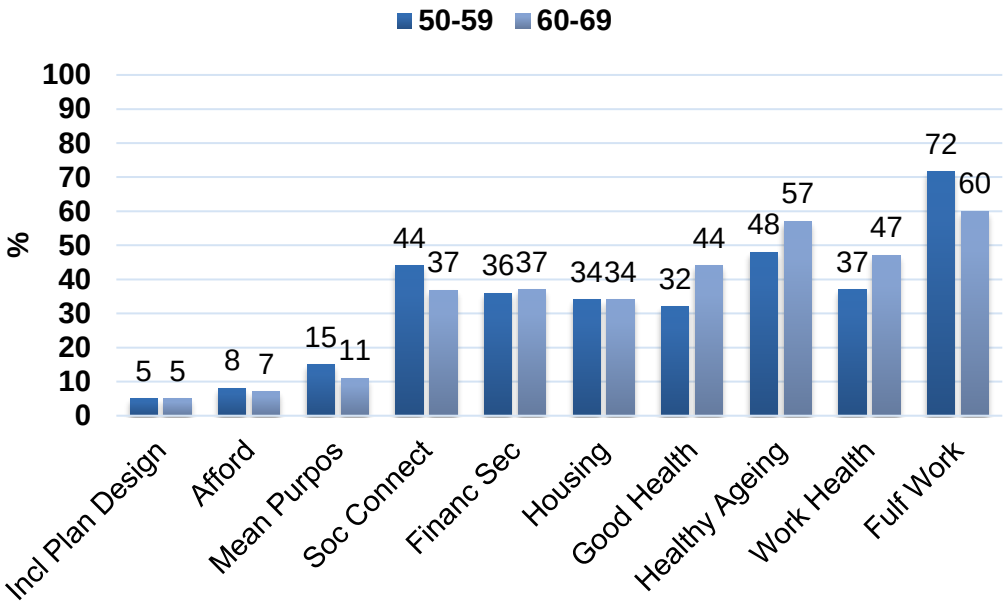


Figure 4.1. Prevalence of men at risk of missing-out on a good later life, by dimension and age group. England 2018

It was uncommon (<10%) for men in their 50s and 60s to be at risk of missing out on a good later life due to a lack of inclusive planning and design (5%) or affordability (8% and 7% respectively).

Compared to men in their 50s, men in their 60s were at elevated risk of missing-out due to a lack of good health (44% vs. 32%), healthy ageing (57%vs. 44%) and work and health (47% vs. 37%).

Men aged 50-59 years, were more likely than men aged 60-69 years to be at risk of missing-out due to a lack of meaning and purpose (15% vs. 11%), social connections (44% vs. 37%) and fulfilling work (72% vs. 60%).

In Figure 4.2, results are presented for women. Compared to women in their 60s, those in their 50s were more likely to be at risk of miss-out due to a lack of affordability (11% vs 6%), social connections (39% vs 34%), financial security (43% vs 40%) and safe and accessible housing (38% vs. 32%).

By contrast, women in their 50s (vs. those in their 60s), were more likely to be at risk of missing-out due to a lack of good health (44% vs. 34%) and healthy ageing (48% vs. 39%)

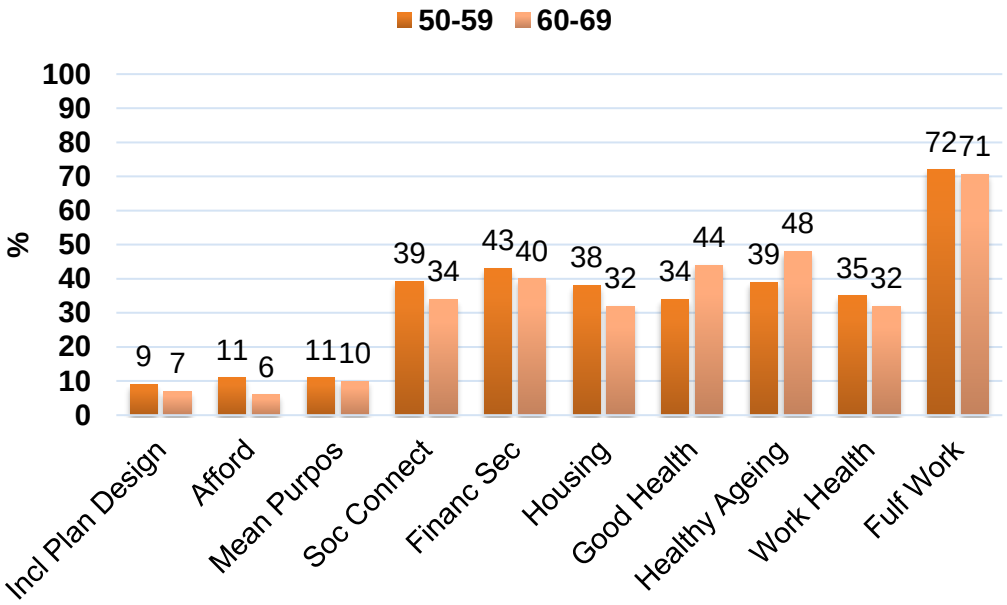


Figure 4.2. Prevalence of women at risk of missing-out on a good later life by dimension and age group. England 2018

In comparison to men, women were at higher risk of missing-out due to a lack of inclusive planning and design and/or financial security, whereas men were more likely to be lacking in the dimensions of work and health and healthy ageing.

Those in the non-white group were at higher risk of missing-out due to a lack of social connections (53% vs 37% for white) and affordability (20% vs 7% for white), but at reduced risk due to more favourable work and health (20% vs 39% for white).

4.5.2 The associations between each CfAB dimension of a good later life and each outcome: ELSA

In Figure 4.3, odds ratios for the association between each dimension of a good later life (examined separately) and disability are reported.

Apart from fulfilling work, being at risk of missing-out due to a lack of any dimension was associated with higher odds of disability. Age and gender differences were not observed except for financial security. Men at risk of missing-out due to a lack of financial security experienced more than double the odds of disability compared to women (OR 7.6 vs. 3.4 in women).

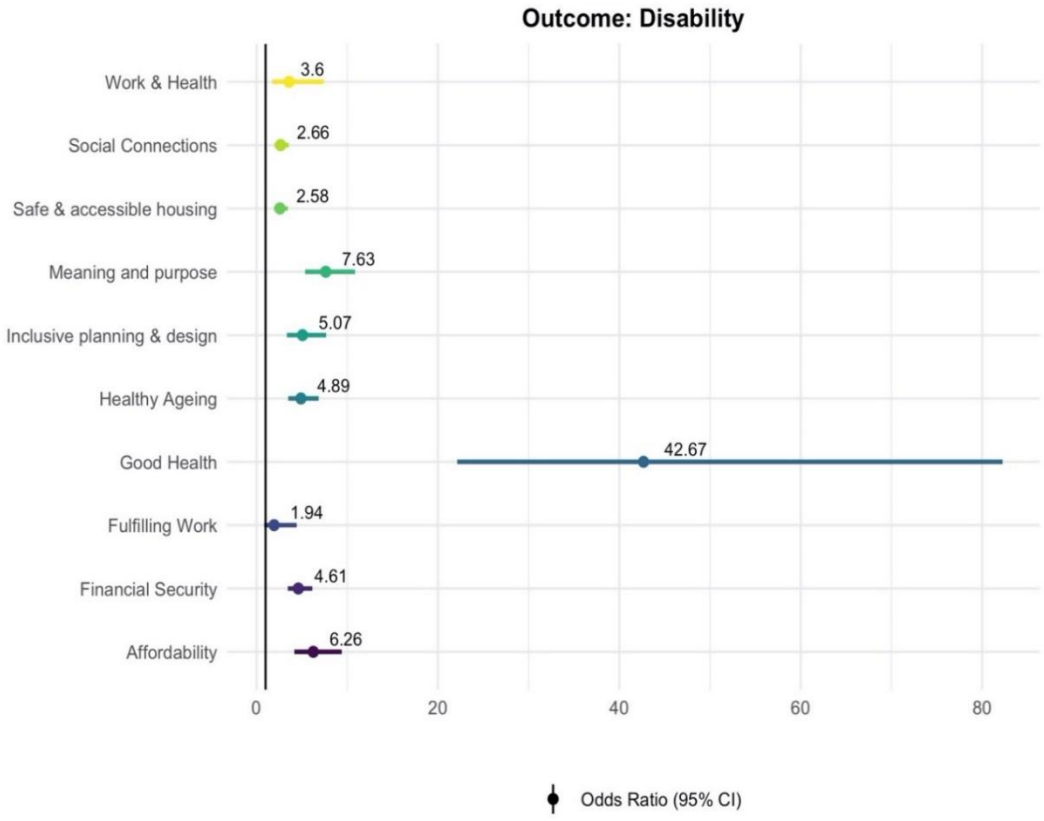


Figure 4.3. Odds ratios adjusted for age and sex, for the association between each dimension of a good later life and disability. England 2018

In Figure 4.4, results are reported for the outcome pain. Being at risk of missing-out on each dimension of a good later life was associated with higher odds of reporting pain, with the exception of fulfilling work. Differences by age or gender were not observed.

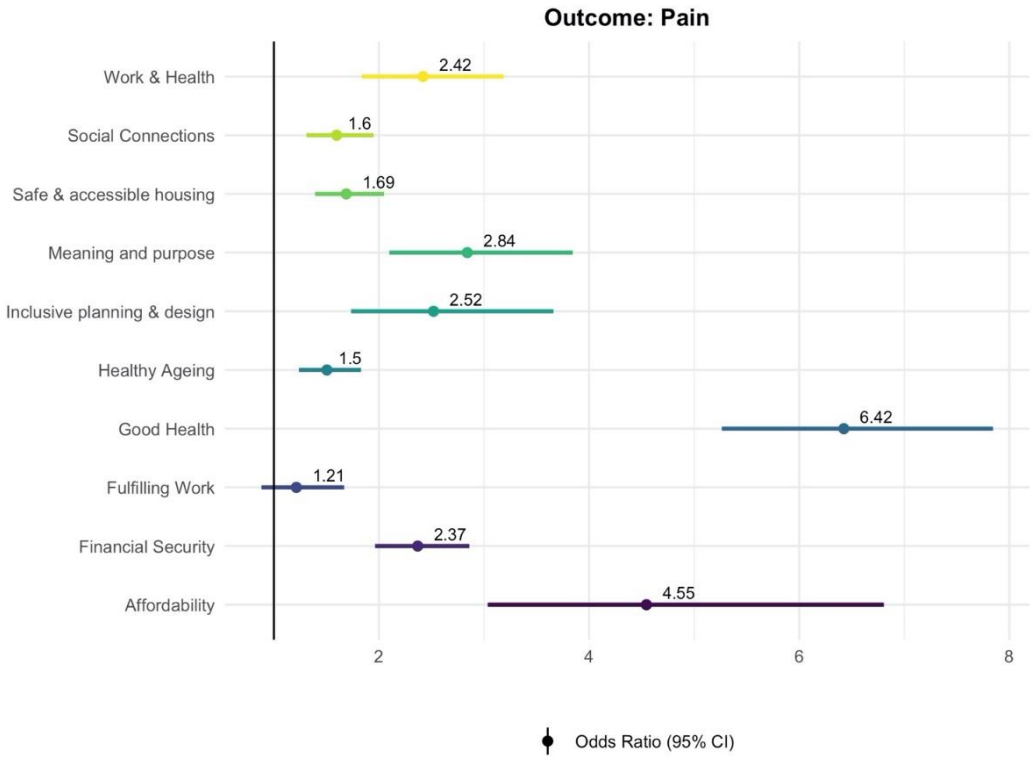


Figure 4.4. Odds ratios adjusted for age and sex, for the association between each dimension of a good later life and pain. England 2018

Figure 4.5 compares the odds of depression in those classified as at risk/not at risk of missing-out on a good later life for each CfAB dimension. These results were adjusted for age and sex. For every dimension, depression was more common in those classified as at risk of missing-out due to that dimension. There was no evidence that findings differed by gender or age group.

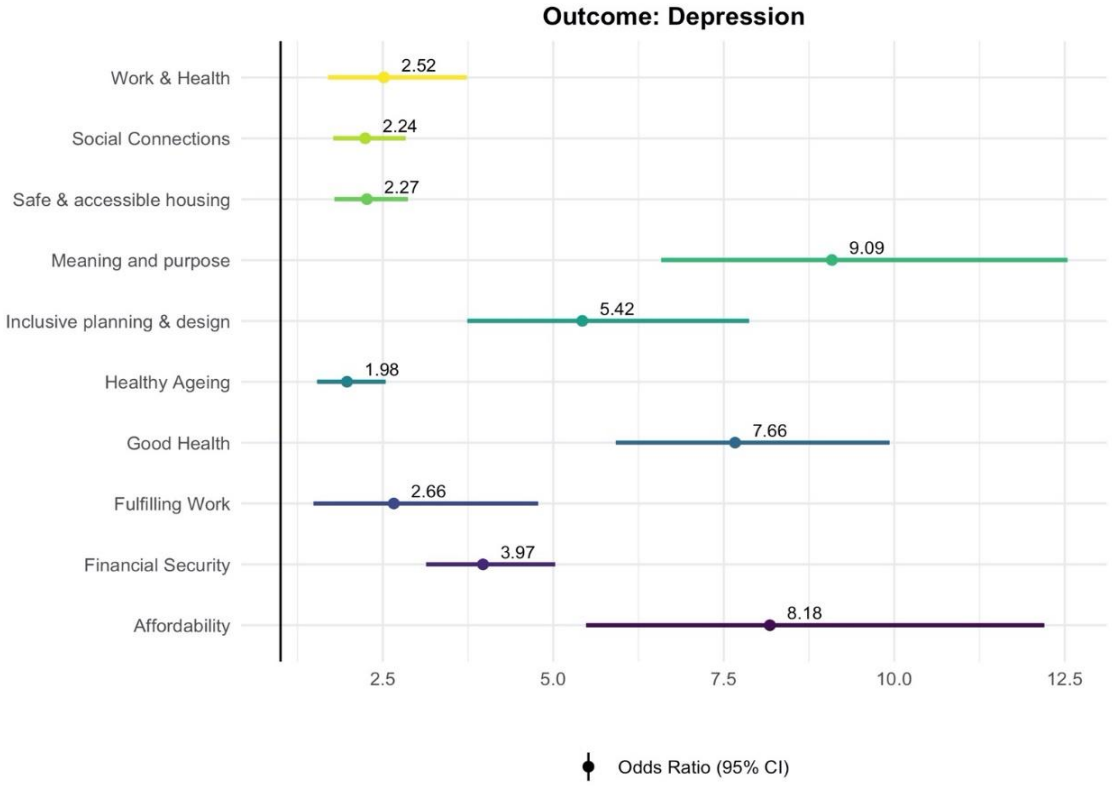


Figure 4.5. Odds ratios adjusted for age and sex, for the association between each dimension of a good later life and depression. England 2018

In Figure 4.6 and 4.7, the results for the outcomes loneliness and lack of companionship are reported. With the exception of work and health, for each dimension, being classified as at risk of missing-out, increased the risk of both being lonely and lacking companionship. Gender differences were not observed.

Those at risk of missing-out due to a lack of social connections, had increased odds of reporting loneliness which varied by age group. Men in their 60s were more likely to report loneliness if they lacked social connection that men in their 50s were (OR: 2.6 vs 1.5). A

similar pattern was observed for the association between being at risk of missing-out due to a lack of financial security and the odds of lacking companionship. People in their 60s were more likely than those in their 50s (OR: 2.6 vs 1.4) to experience a lack of companionship if they lacked financial security.

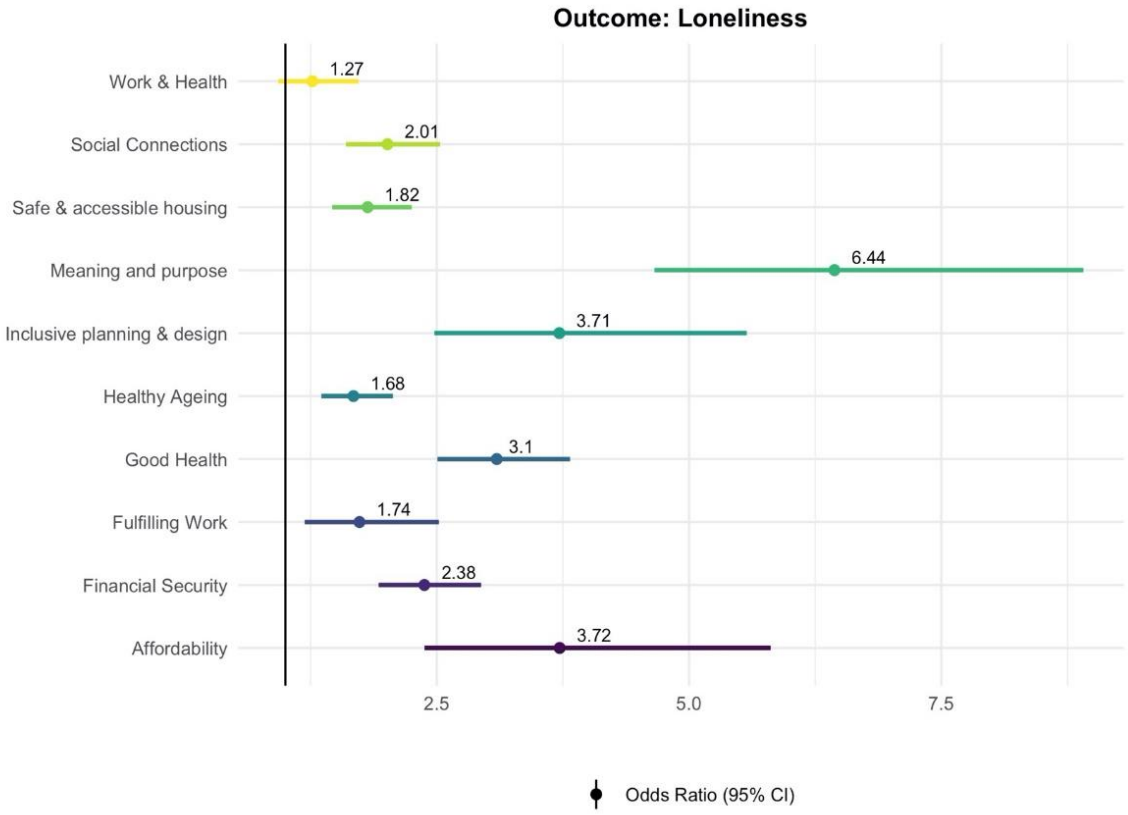


Figure 4.6. Odds ratios adjusted for age and sex, for the association between each dimension of a good later life and loneliness. England 2018

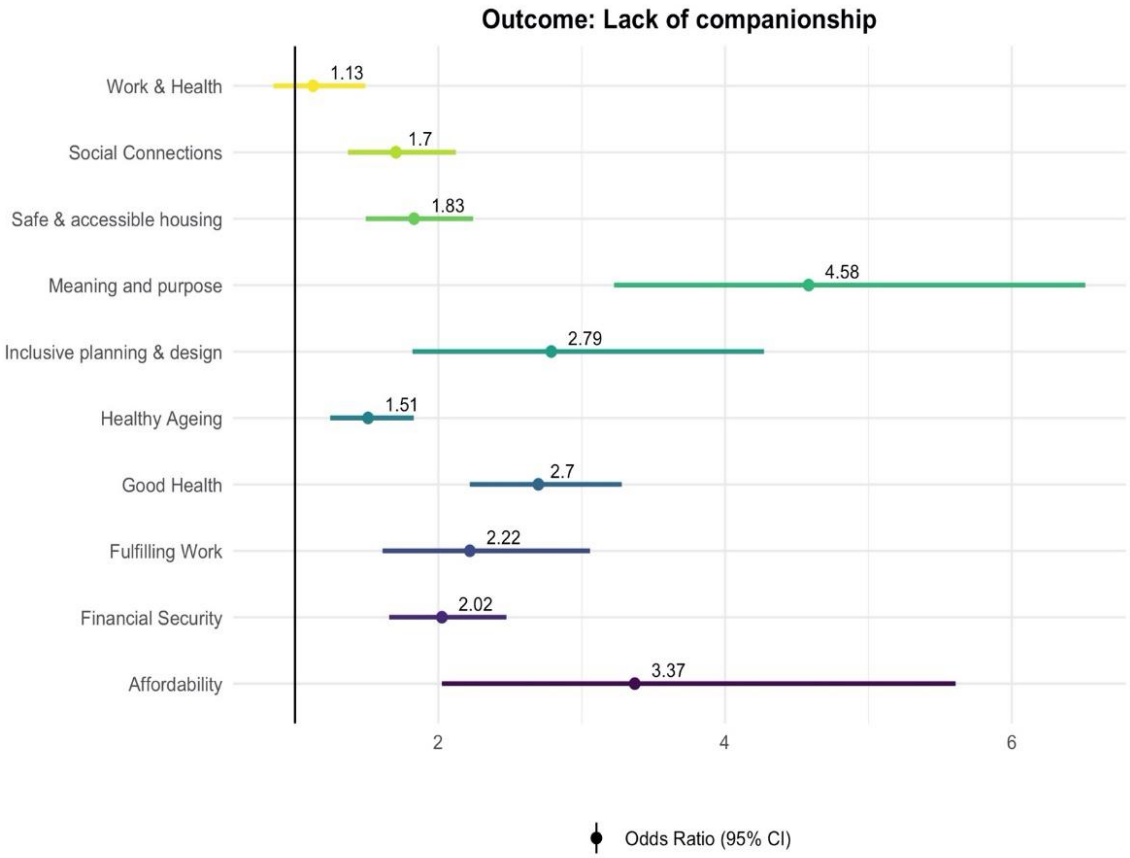


Figure 4.7. Odds ratios adjusted for age and sex, for the association between dimensions of a good later life and lack of companionship. England 2018

Lastly, in Figures 4.8 and 4.9, the results for wellbeing and life satisfaction scores are presented. The figures illustrate the reduction in total scores for those at risk of missing-out on each dimension of a good later life, compared to those not classified as at risk.

Reduced scores were observed for both ONS wellbeing and life satisfaction, for those at risk of missing-out on: social connections, inclusive planning and design, financial security, safe and accessible housing, good health, healthy ageing, and fulfilling work. The greatest reduction in wellbeing and life satisfaction scores was seen for those at risk of missing-out on meaning and purpose and affordability. There were no gender differences observed. In terms of age, the only difference in the associations was in the dimension of financial security where those in their 60s had a higher reduction in life satisfaction than those in their 50s (Coefficient -4.4 vs -2.8).

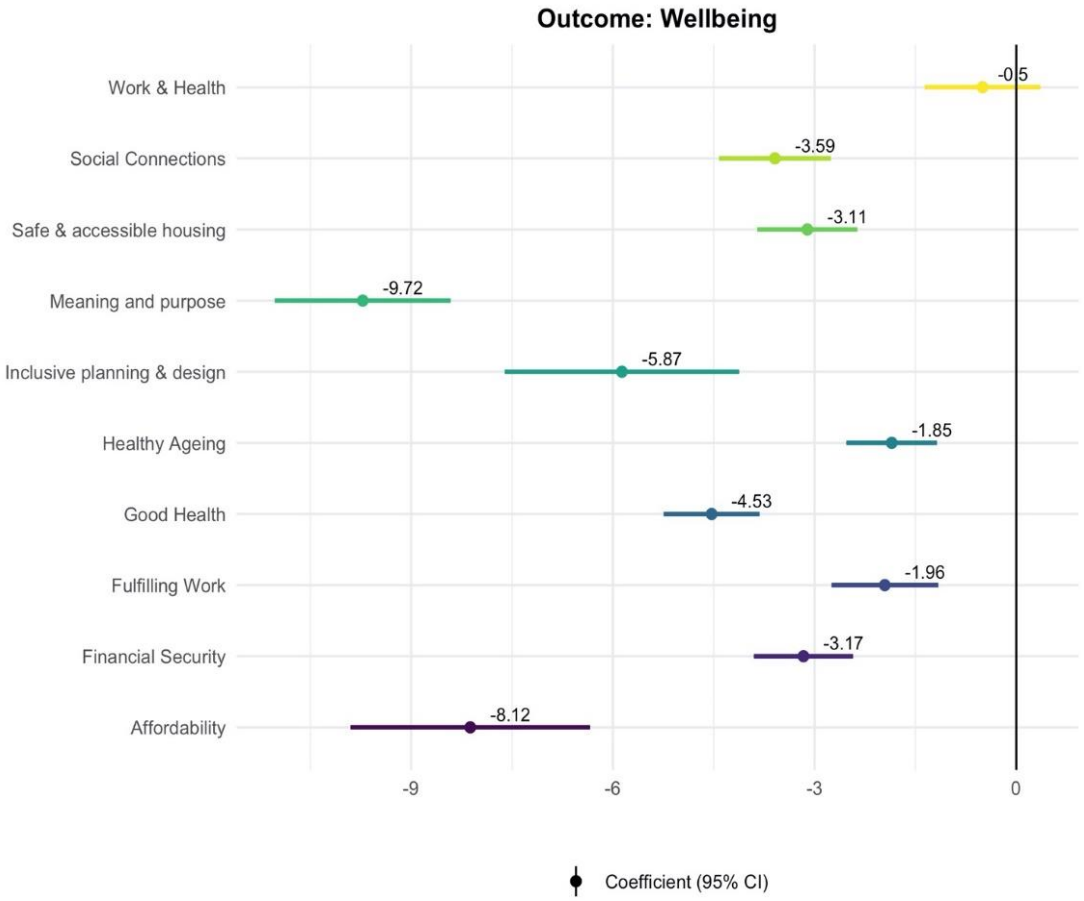


Figure 4.8. Linear regression coefficients adjusted for age and sex, for the association between each dimension of a good later life and ONS wellbeing score. England 2018

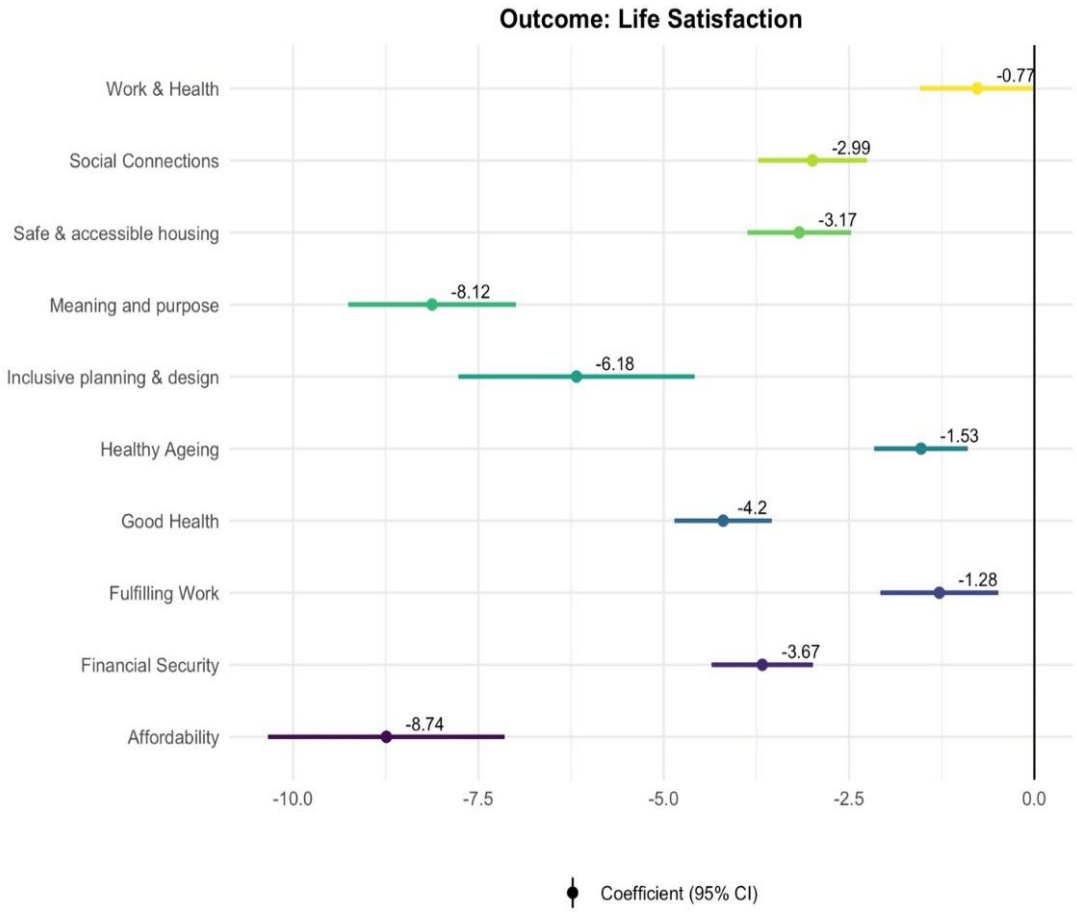


Figure 4.9. Linear regression coefficients adjusted for age and sex, for the association between each dimension of a good later life and life satisfaction score. England 2018

4.5.3 Multi-dimensional risk of missing-out on a good later life across all CfAB dimensions: ELSA

4.5.3.1 The relationship between risk group and binary CfAB dimension variables: ELSA

The associations between the risk group assigned after latent class analysis (low, medium and high) and each binary dimension variable were explored.

The no/low risk group was found to be at moderate risk of missing-out due to a lack of healthy ageing only. Compared to the low risk group, the medium risk group was found to be at higher risk of missing-out on a good later life, due to a lack of the following: social connections, healthy ageing, good health, health at work, and fulfilling work. The high-risk group experienced all the heighted risk of the medium group (except for fulfilling work), but in addition were at risk due to a lack of financial security, safe and accessible housing and meaning and purpose as well.

4.5.3.2 The distribution of age and gender by risk group: ELSA

In Figures 4.10 and 4.11, the distribution of age and gender by risk group are reported.

Overall, 57% of men and 58% of women in their 50s were classified as at low risk, compared to 53% of men and 61% of women in their 60s.

The medium risk group included 28% of men and 22% of women in their 50s and 26% of men and 18% of women in their 60s. Around 20% of women irrespective of age group (and men in their 60s) were classified as high-risk, in contrast to 16% of men in their 50s.

There was evidence that women in their 60s were more likely to be in the low risk group than men of a similar age, but women in their 50s were more likely to be in the high-risk group compared to men. Men were over-represented in the medium risk group.

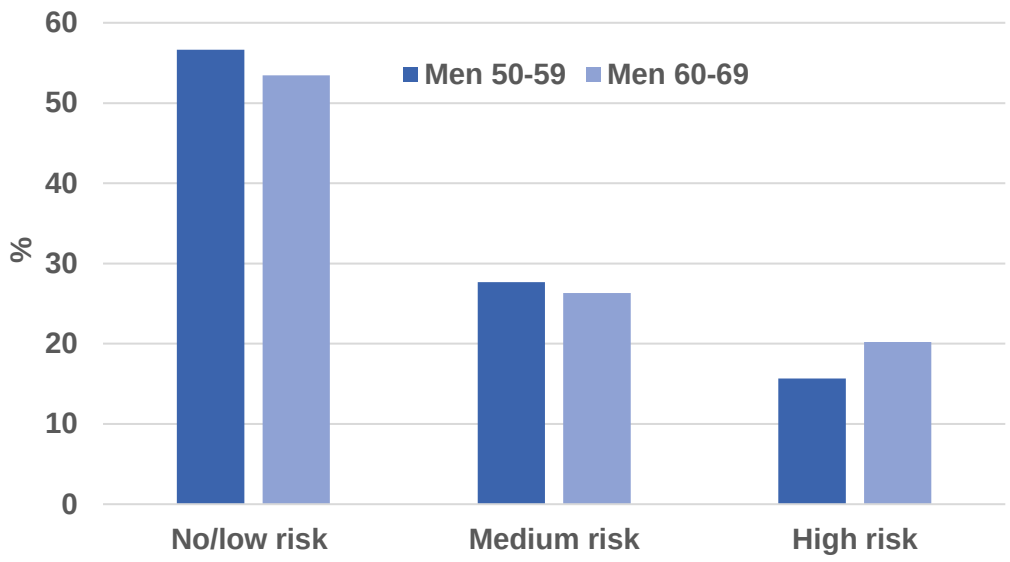


Figure 4.10. Good later life risk groups by age in Men. England 2018

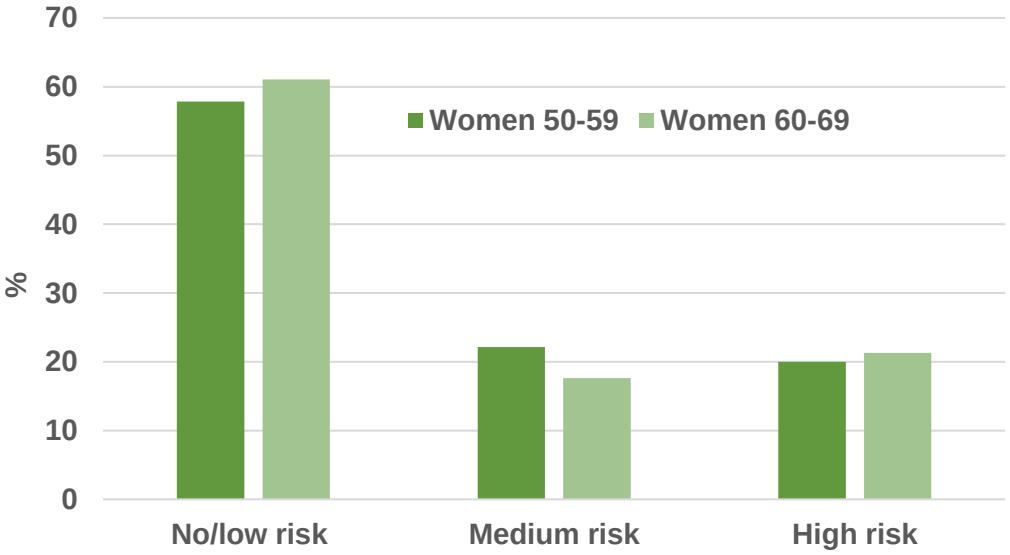


Figure 4.11. Good later life risk groups by age in Women. England 2018

Differences were evident by ethnic group. Overall, 57% of those in the white ethnic group were classified as no/low risk compared to 66% in the non-white group ($p<0.05$).

For medium risk, 24% of white and 11% of non-white people were assigned to this group ($p<0.05$). There was however no statistical evidence of a difference by ethnic group for the high-risk group (23% for white vs. 20% for non-white).

4.5.3.3 The relationship between risk group and outcomes: ELSA

The relationship between risk groups and outcomes were explored. These comprised: disability-free life expectancy, pain, depression, loneliness, lack of companionship, ONS-wellbeing and life satisfaction.

Disability

In Table 4.22, estimated disability-free life expectancy is reported by risk group for men and women, stratified by age (50-54, 55-59, 60-64, 65-69 years). For each age group, a clear gradient in the number of years was observed by risk. Those in the low risk group could expect to live up to 11 more years free of disability compared to the high-risk group. The difference between the low risk group and the medium group was less marked. However, the difference between the medium and high-risk group was 8.8-10 years for men and 9-10 years for women.

Table 4.22. Disability-free life expectancy by level of risk of missing-out on a good later life, by age and sex. England 2018.

	Years expected to live without disability											
Men	**50-54**	**95%CI Low**	**95% CI High**	**55-59**	**95%CI Low**	**95% CI High**	**60-64**	**95%CI Low**	**95% CI High**	**65-69**	**95%CI Low**	**95% CI High**
No/Low	33.0	32.1	33.0	28.0	27.8	28.6	24.0	23.6	24.4	20.0	19.5	20.4
Medium	31.0	30.2	31.4	27.0	25.9	27.1	22.0	21.6	22.8	18.0	17.6	18.8
High	22.0	20.6	22.7	17.0	16.4	18.3	13.0	12.4	13.9	9.0	8.4	9.8
Women	**50-54**	**95%CI Low**	**95% CI High**	**55-59**	**95%CI Low**	**95% CI High**	**60-64**	**95%CI Low**	**95% CI High**	**65-69**	**95%CI Low**	**95% CI High**
No/Low	34.0	32.8	34.9	29.0	28.2	30.3	25.0	23.7	25.9	21.0	20.0	22.1
Medium	33.0	31.3	34.0	28.0	26.7	29.5	24.0	22.4	25.1	20.0	18.2	20.9
High	23.0	21.0	24.2	18.0	16.4	19.7	14.0	12.1	15.3	10.0	8.0	11.2

Additional outcomes

Figures 4.12 to 4.17 report the relationships between good later life risk groups and pain, depression, loneliness, lack of companionship, low wellbeing and lack of life satisfaction.

Those in the medium risk group compared to those at low risk, had greater odds of experiencing pain, depression and low life satisfaction scores. Those in the high-risk group were more likely to experience all outcomes than the low risk group, with a near 8-fold increase in odds of experiencing pain and 15-fold increase in odds of depression. They were eight times more likely to report being lonely and four times more likely to lack companionship.

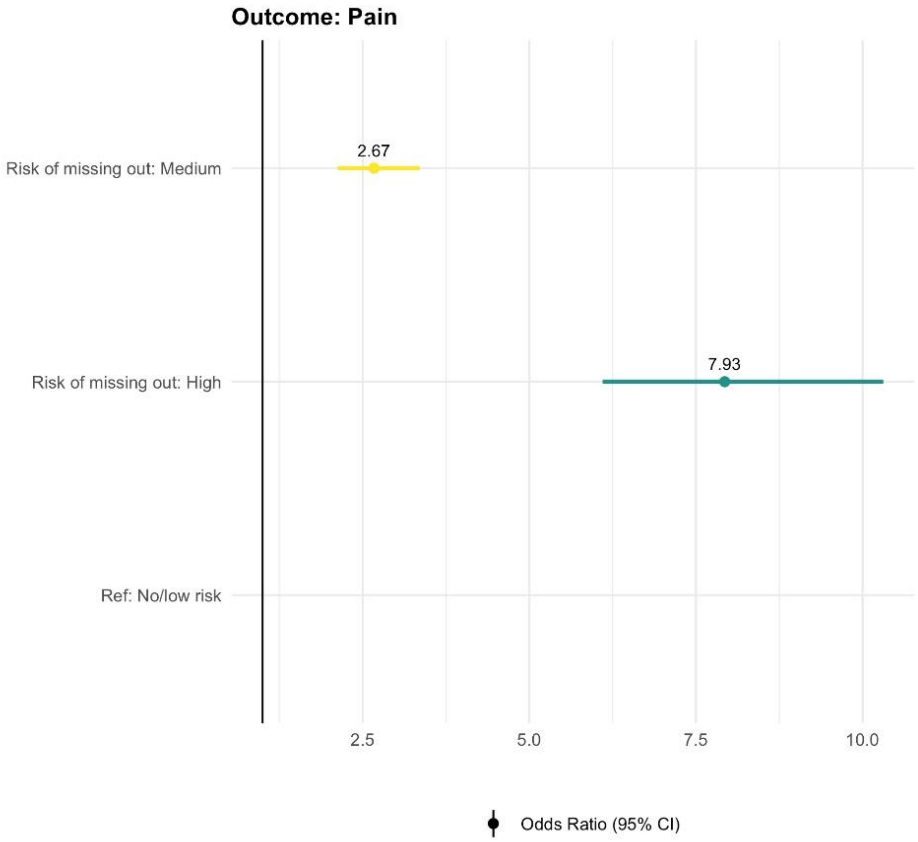


Figure 4.12. Odd ratios for the association between pain and the grouping of a good later life. England 2018

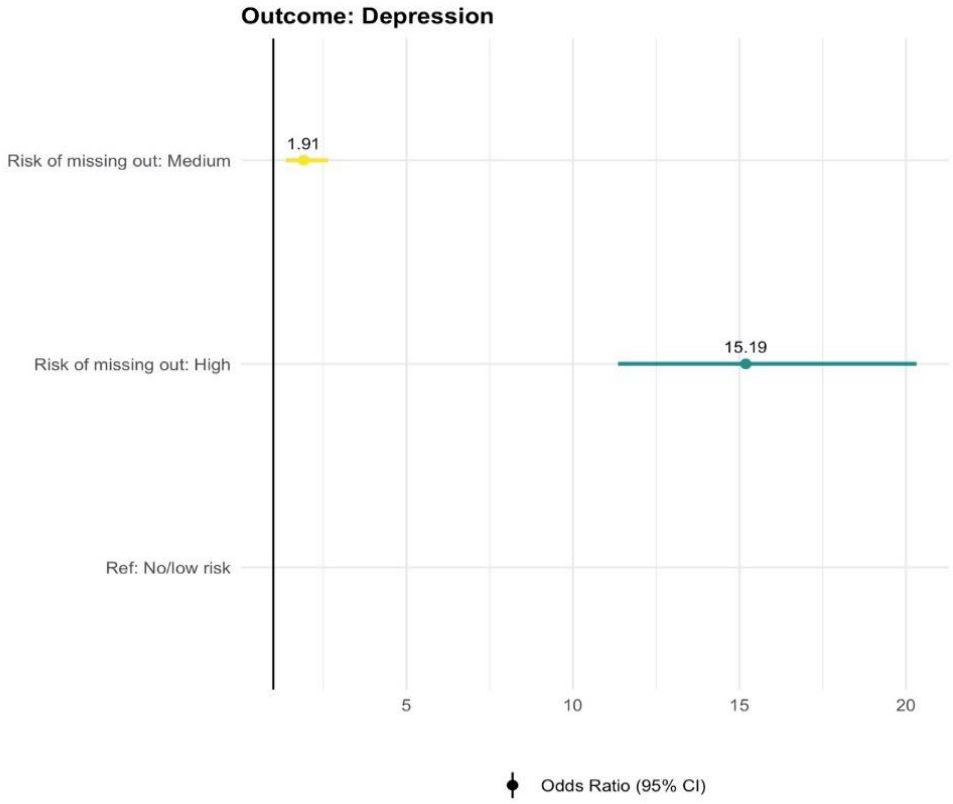


Figure 4.13. Odd ratios for the association between depression and the grouping of a good later life. England 2018

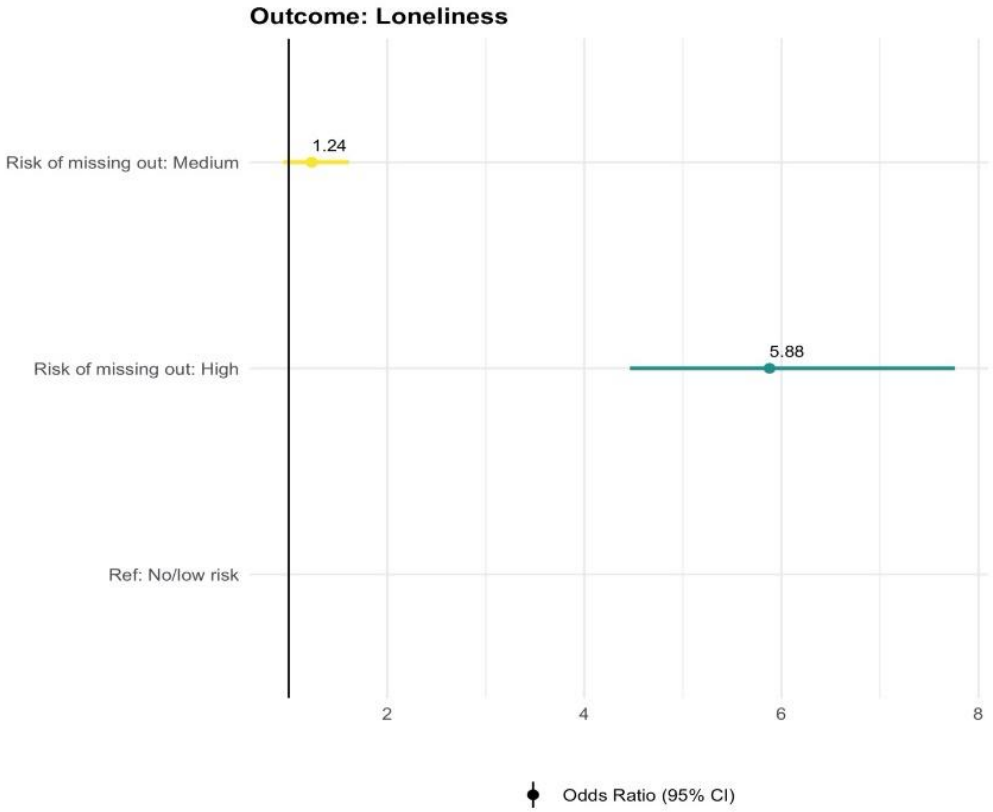


Figure 4.14. Odd ratios for the association between loneliness and the grouping of a good later life. England 2018

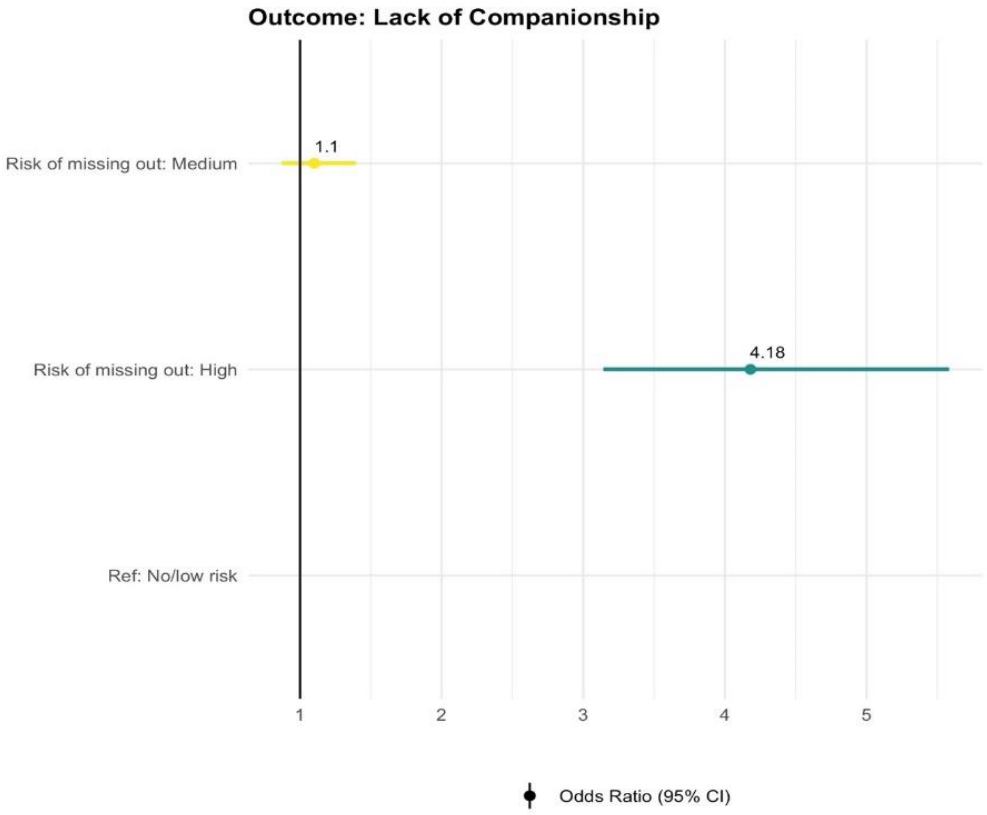


Figure 4.15. Odd ratios for the association between lack of companionship and the grouping of a good later life. England 2018

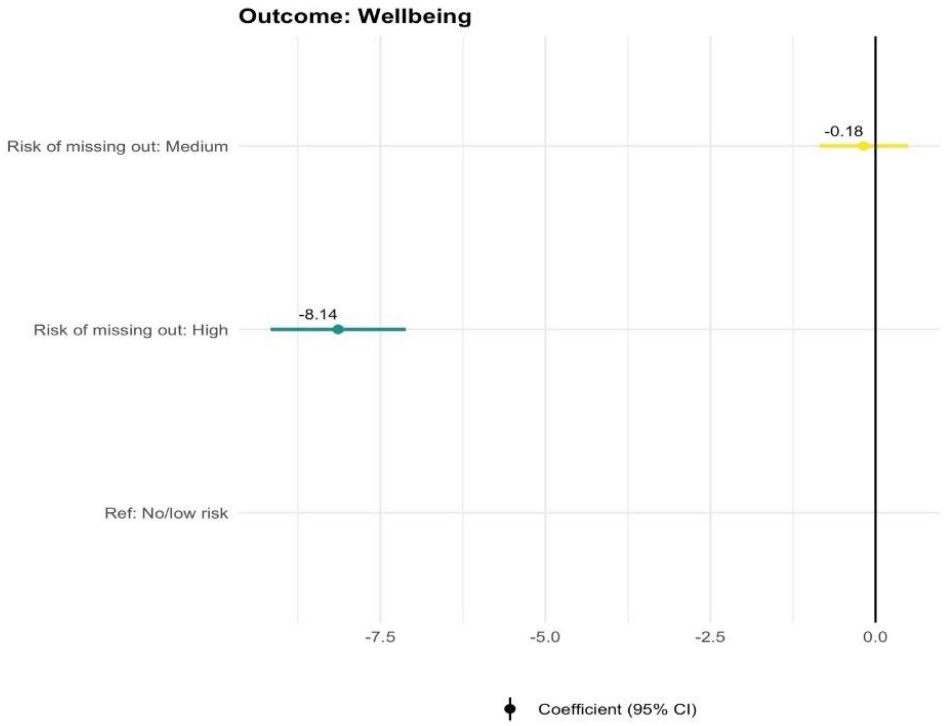


Figure 4.16. Linear regression coefficients for the association between wellbeing and the grouping of a good later life (negative scores indicate lower wellbeing). England 2018

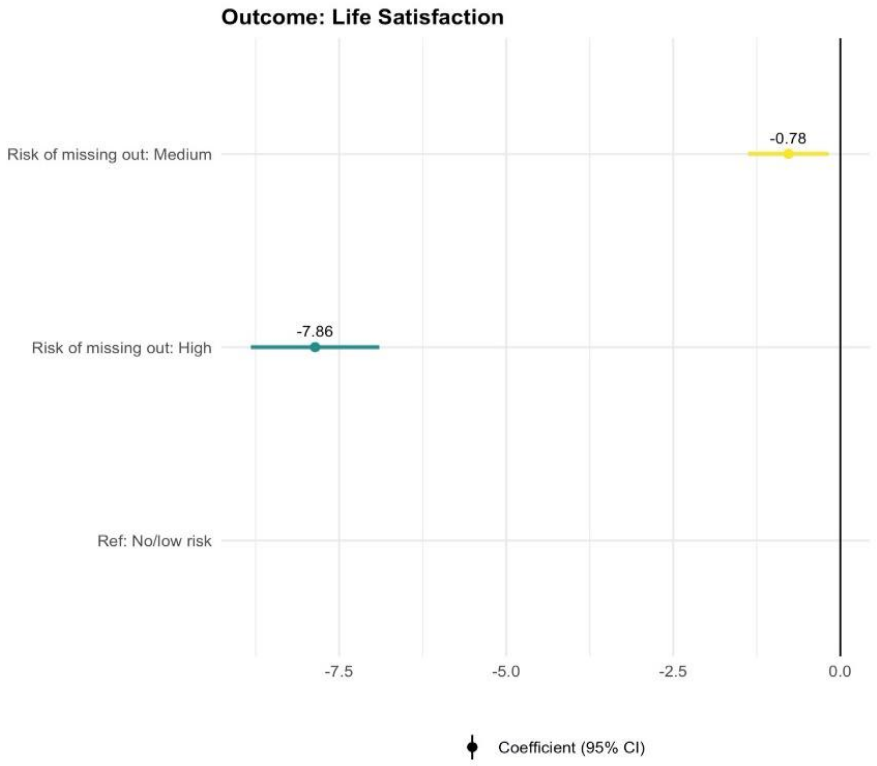
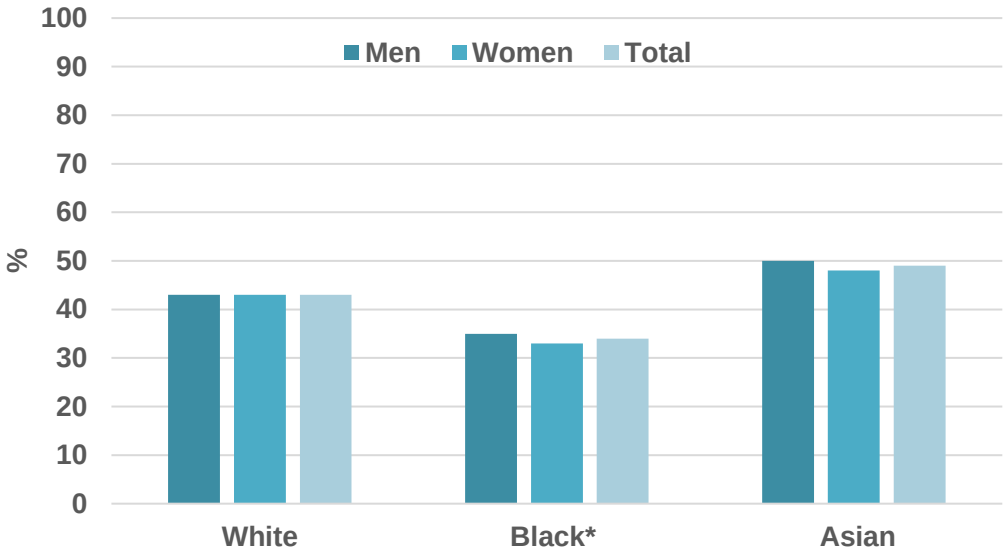


Figure 4.17. Linear regression coefficients for the association between life satisfaction and the grouping of a good later life (negative scores indicate lower life satisfaction). England 2018

4.6 Results: exploring binary CfAB dimension variables: Understanding Society

4.6.1 Gender and age distribution of those classified as at risk of missing-out by each CfAB dimension

In Figures 4.18-4.26, the prevalence of men and women at risk of missing-out due to each dimension of a good later life is presented overall and by ethnic group. Approximately half of Asian men and women were at risk of missing-out due to a lack of social connections, compared to 43% of white and 33% of black people (Figure 4.18). BAME were more likely to be at risk of missing-out due to a lack of connected communities (Figure 4.19) compared to those of white ethnicity (60% of black and 56% of Asian compared to 47% of white).



* Estimates for men and women in the Black ethnic group are based on a small sample size

Figure 4.18. Prevalence of men and women at risk of missing-out due to a lack of social connections, by ethnic groups. Understanding Society 2018

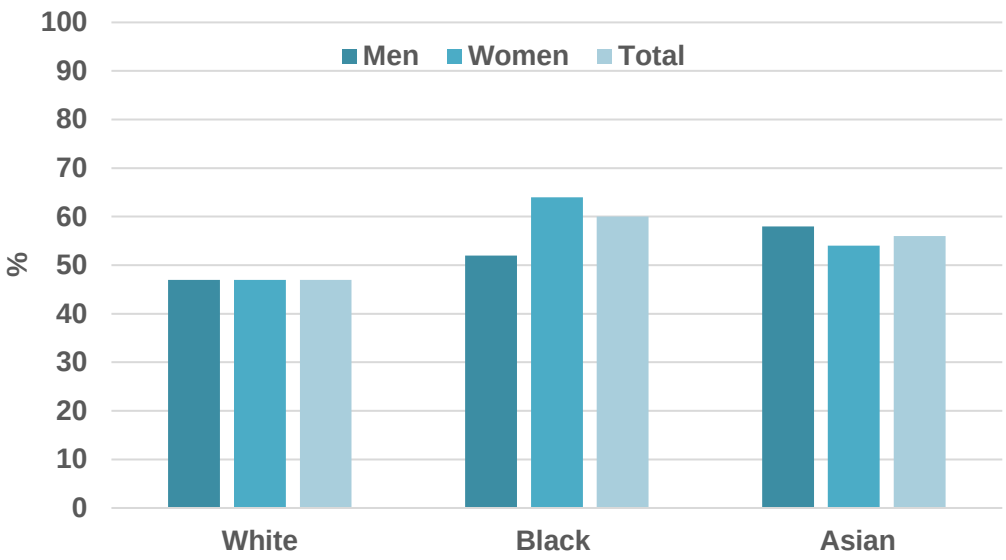


Figure 4.19. Prevalence of men and women at risk of missing-out due to a lack of connected communities, by ethnic groups. Understanding Society 2018

The risk of missing-out due to a lack of good health appeared to vary by ethnic group: white 30%, black 25% and Asian 26% (Figure 4.20). However, there was no statistical evidence of a difference. The prevalence of those at risk of missing-out due to a lack of healthy ageing (Figure 4.21 was highest amongst Asian men and women (70% and 72%, respectively), and similar amongst those of black and white ethnicity (59% vs 61%).

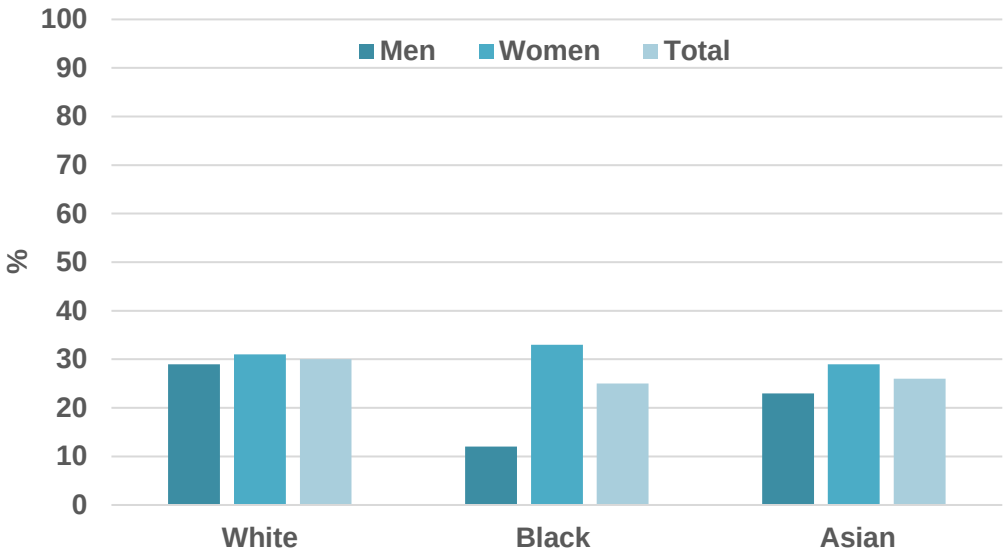


Figure 4.20. Prevalence of men and women at risk of missing-out on good health, by ethnic groups. Understanding Society 2018

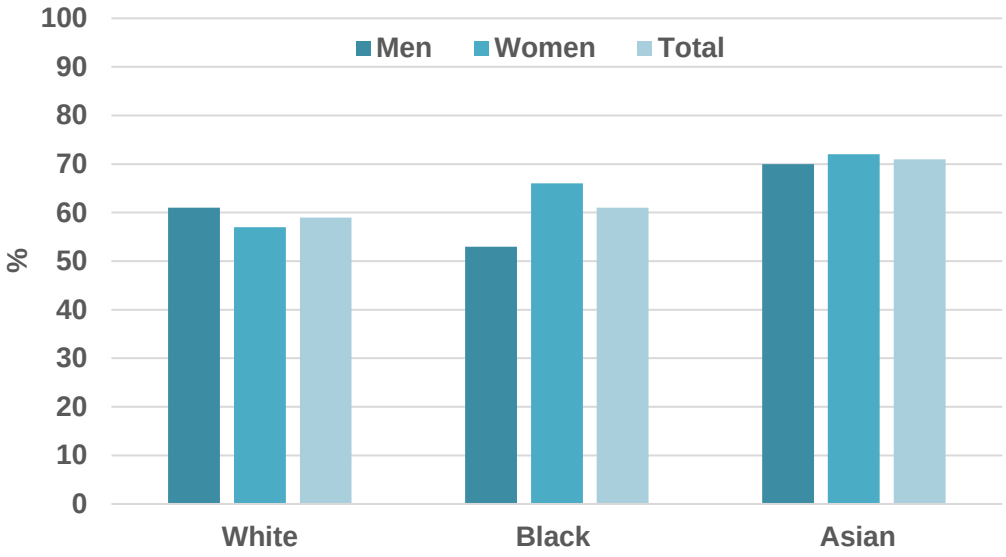
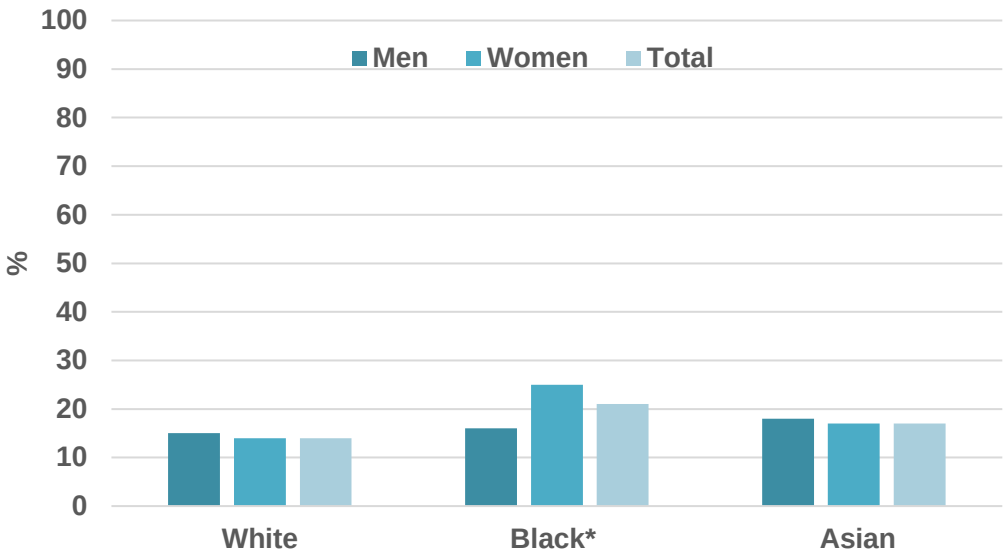


Figure 4.21. Prevalence of men and women at risk of missing-out on healthy ageing, by ethnic groups. Understanding Society 2018

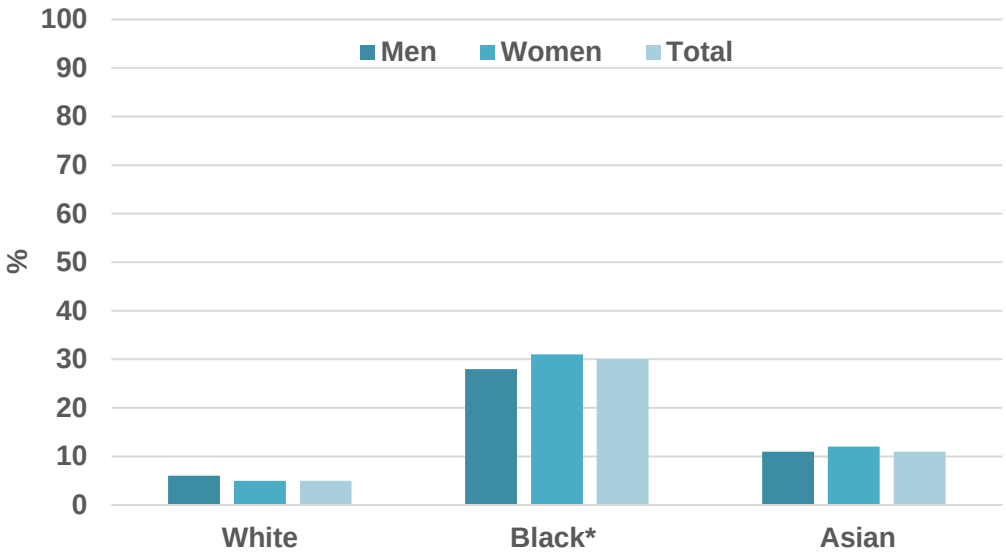
One in five of the black ethnic group were at risk of missing-out on safe and accessible housing (21% black, 14% white and 17% Asian). More women in the this ethnic group (25%) reported being at risk of missing-out on a safe and accessible housing compared to white (16%) or Asian (17%) (Figure 4.22).



* Estimate for Black men may not be reliable as sample size is small

Figure 4.22. Prevalence of men and women at risk of missing-out on safe and accessible housing, by ethnic groups. Understanding Society 2018

The prevalence of being at risk of missing-out due to a lack of affordability was 30% amongst those of black ethnicity, 11% amongst the Asian group and 5% among the white group (Figure 4.23). Similarly, 77% of people from black ethnic groups and 63% from Asian groups were at risk of missing-out due to lack of financial security compared to 47% in the white group (Figure 4.24).



* Estimate for Black men may not be reliable as sample size is small

Figure 4.23. Prevalence of men and women at risk of missing-out due to lack of affordability, by ethnic group. Understanding Society 2018

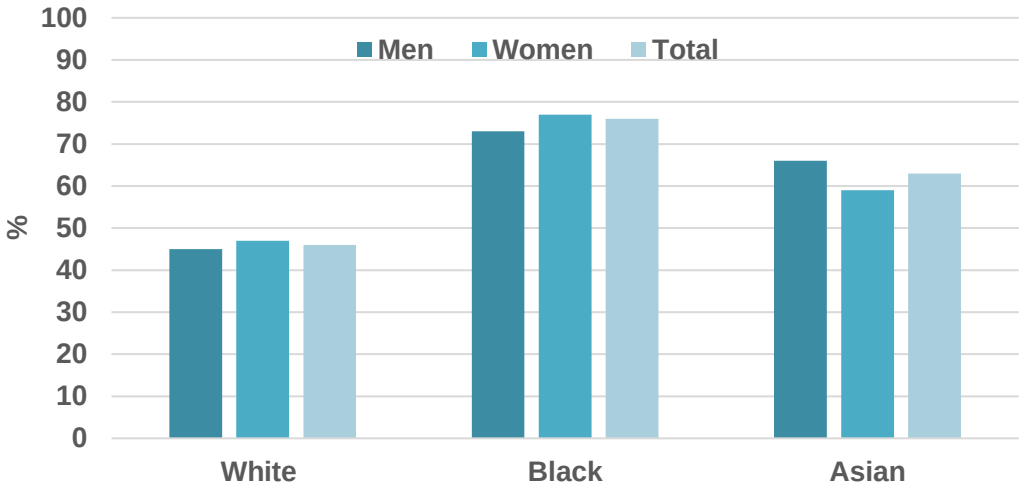
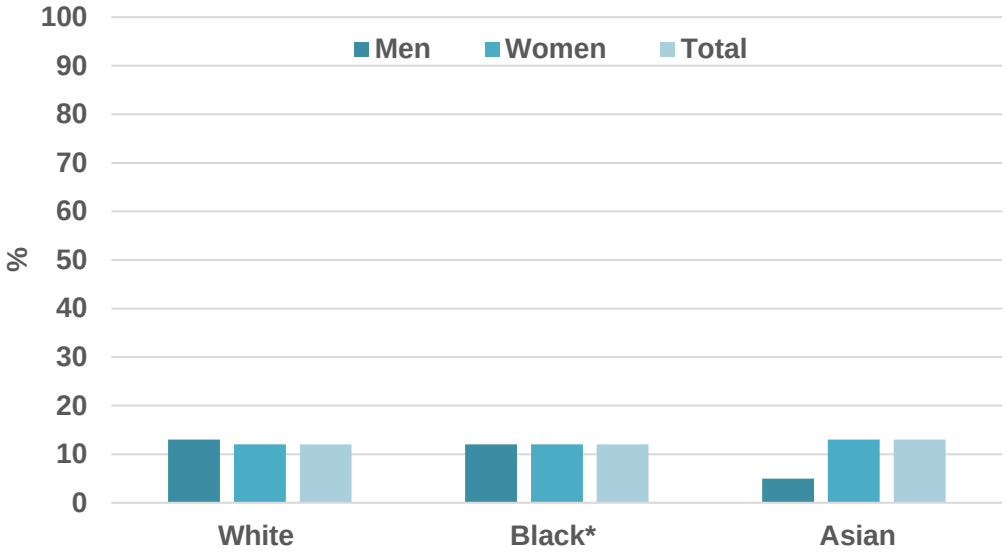


Figure 4.24. Prevalence of men and women at risk of missing-out due to a lack of financial security, by ethnic groups. Understanding Society 2018

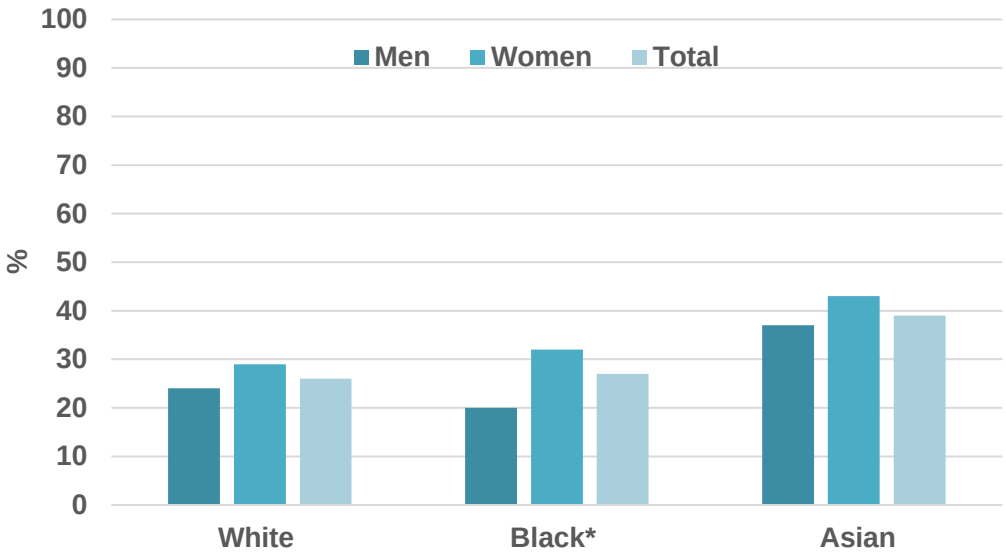
The prevalence of men and women at risk of missing out on a good later life due to a lack of fulfilling work and work and health are presented in Figures 4.25 and 4.26, respectively.

Amongst those in work, the prevalence of risk of missing-out due to a lack of fulfilling work was 12%. There was no evidence this varied by ethnicity. For work and health, 23% of the white group, 27% of the black and 39% of Asian people were at risk of missing-out due to a lack of this dimension. The highest prevalence was observed for Asian women, of whom 43% were at risk of missing-out due to a lack of work and health.



* Estimate for Black men may not be reliable as sample size is small

Figure 4.25. Prevalence of men and women at risk of missing-out on fulfilling work, by ethnic groups. Understanding Society 2018



* Estimate for black men may not be reliable as sample size is small

Figure 4.26. Prevalence of men and women at risk of missing-out on work and health, by ethnic groups. Understanding Society 2018

4.6.2 The association between each CfAB dimension of a good later life and each outcome

The results of regression modelling of the association between each dimension of a good later life and the outcomes loneliness, pain and depression are presented after adjustment for ethnicity, age and sex (Figures 4.27-4.29).

In Figure 4.27, the association between each dimension of a good later life and loneliness are presented. With the exception of social connections, being at risk of missing-out on each dimension of a good later life was associated with higher odds of loneliness. No evidence of difference by ethnic group or gender was observed.

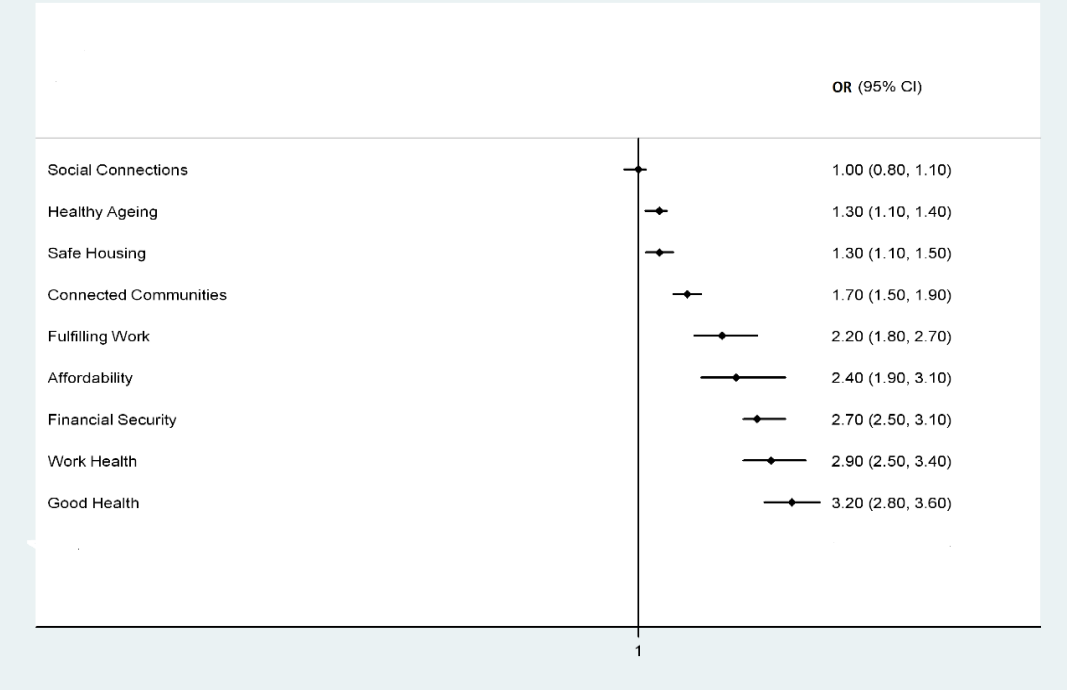


Figure 4.27. Odds ratios adjusted for age and sex, for the association between dimensions of a good later life and loneliness. Understanding Society 2018

In Figure 4.28, the association between each dimension of a good later life and pain are summarised. Being at risk of missing-out due to any dimensions of a good later life (except social connections) increased the odds of experiencing pain. There was no evidence that this differed by ethnic groups, except for financial security, where the risk of experiencing pain was highest among people of Asian ethnicity (OR, 8.2; 95%CI, 4.4-15.1).

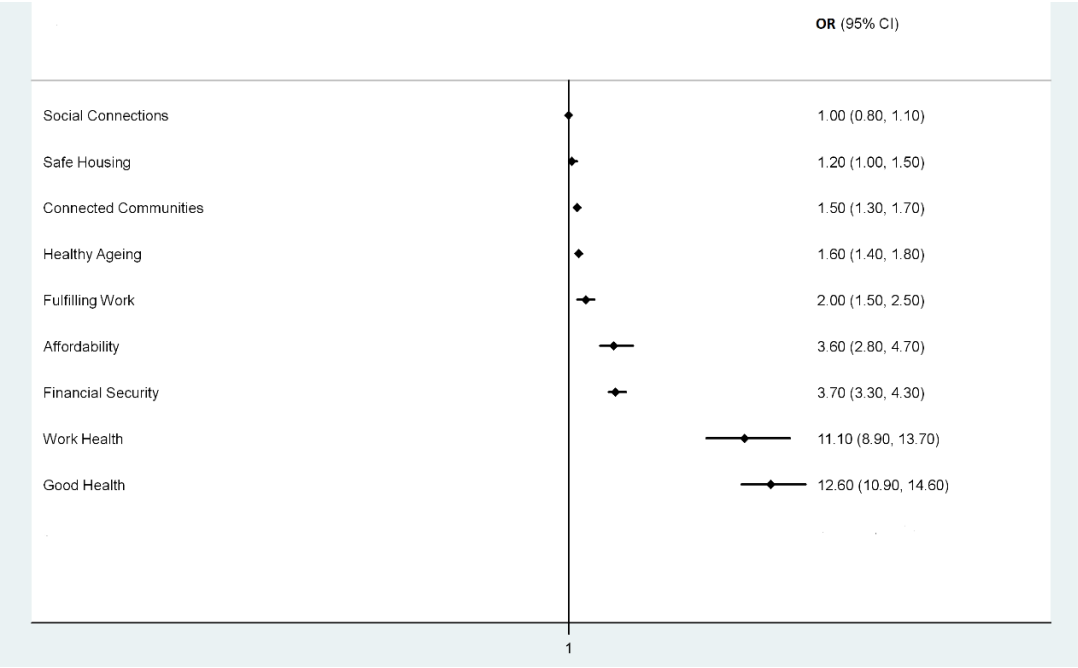


Figure 4.28. Odds ratios adjusted for age and sex, for the association between each dimensions of a good later life and pain. Understanding Society 2018

The associations between each dimension of a good later life and depression are presented in Figure 4.29. There was evidence that being at risk of missing-out due to any dimension of a good later life (with the exception of social connection) increased the odds of experiencing depression. In addition, for those at risk of missing-out due to financial security, those in the Asian group had higher odds of depression compared to those in the white group (OR, 7.8; 95%CI; 3.8-15.8).

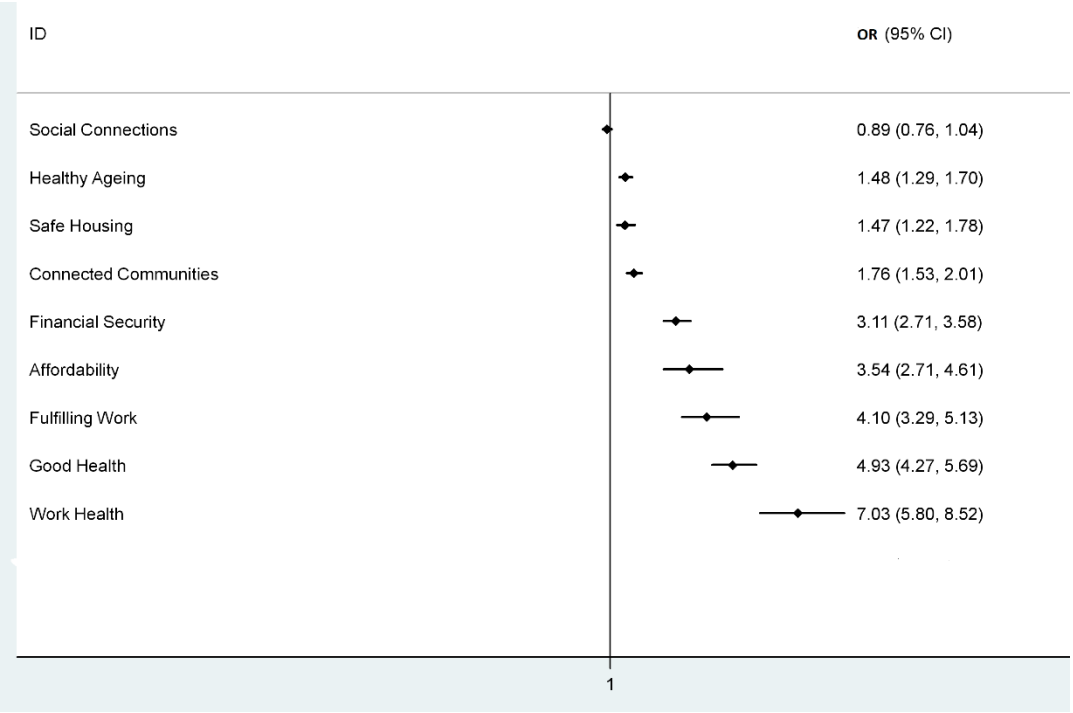


Figure 4.29. Odds ratios adjusted for age and sex, for the association between dimensions of a good later life and depression. Understanding Society 2018

4.6.3 Multi-dimensional risk of missing-out on a good later life across CfAB dimensions: Understanding Society

4.6.3.1 The relationship between risk group and binary CfAB dimension variables: Understanding Society

The low risk group reported moderate probability of missing-out due a lack of healthy ageing and social connection. Compared to the low risk group, the medium risk group reported increased risk of missing-out due to lack of social connections, financial security, healthy ageing and connected communities. The high-risk group, in addition to the risk elevations seen in the medium risk group were also at risk due to a lack of good health, and health at work.

4.6.3.2 The distribution of age and gender by risk group: Understanding Society

In Figures 4.30 and 4.31, the risk of missing-out on a good later life is presented by ethnic group. Over half of white men and women were in the low risk groups, compared to 40% of the Asian group, 39% of black men and 31% of black women. Those of black ethnicity were

over represented in the medium risk group (42% of men and 32% of women). A high prevalence of black women and Asian men and women were assigned to the high-risk group.

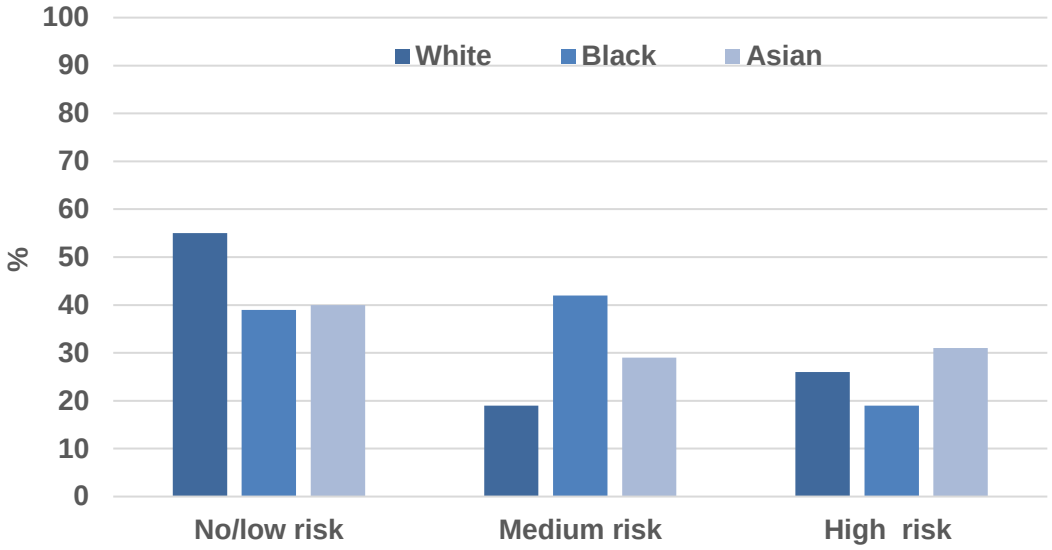


Figure 4.30. Good later life risk groups by ethnicity in Men. Understanding Society, 2018

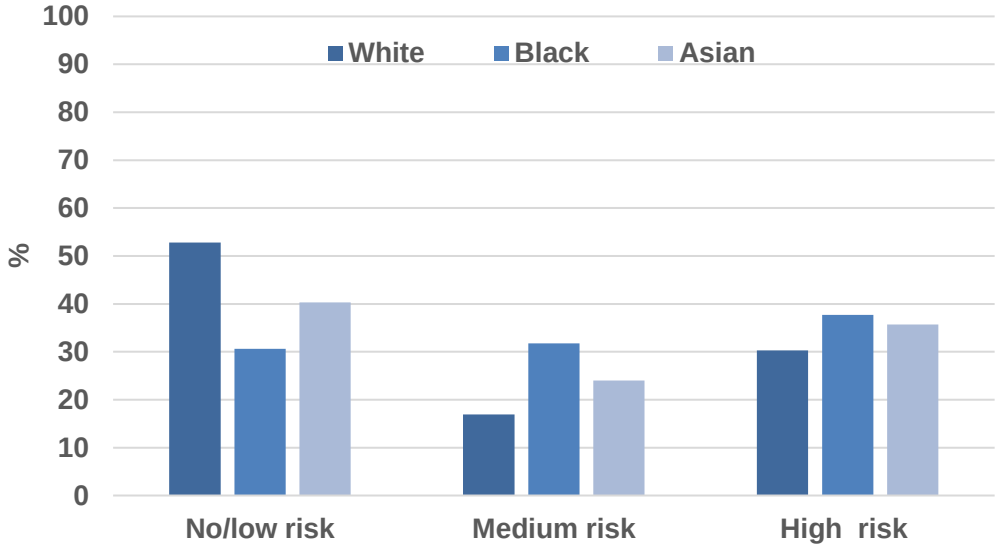


Figure 4.31. Good later life risk groups by ethnicity in Women. Understanding Society 2018

4.6.3.3 The relationship between risk group and outcomes: Understanding Society

The association between the risk of missing-out on a good later life (low, medium and high) and pain, depression and loneliness are presented (Figure 4.32). Those in the medium risk group experienced higher odds of loneliness and depression compared to those in the low risk group. People in the high-risk group were more likely to feel pain, loneliness and depression than those in the low risk group.

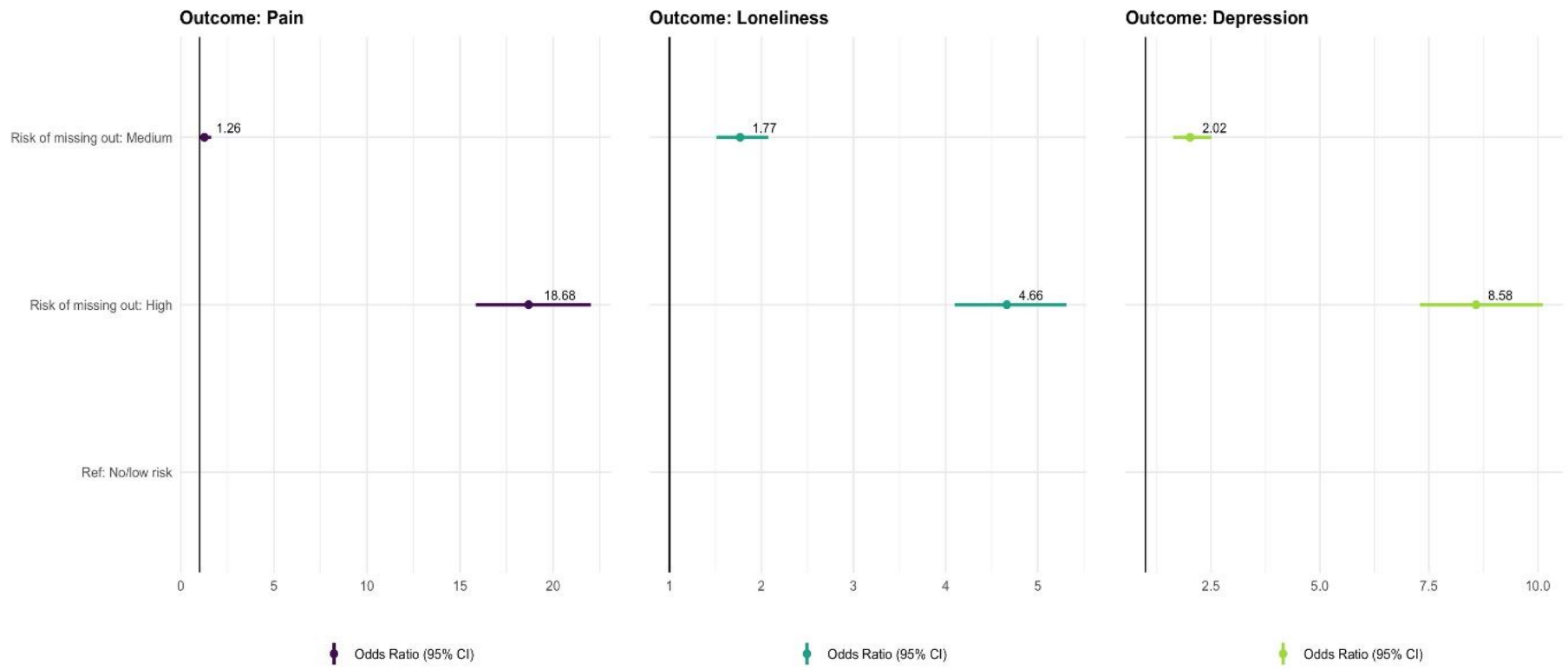


Figure 4.32. Odd ratios for the association between pain, loneliness and depression and the grouping of a good later life. Understanding Society, 2018

4.7 Summary of findings

4.7.1 ELSA

This chapter provides insight into the lives of people in their 50s and 60s living in private households in England in 2018.

Challenging working conditions were common. Around a third of people felt they lacked control at work and a similar percentage felt they put more effort into their job than the reward they got from it. More than half of people reported that their job was too demanding. Women and men in their 50s were more likely to report less favourable working conditions than those in their 60s.

Sub-standard and problematic housing conditions were common, with about a third of people affected. Cramped living conditions, excess noise, damp, cold and pollution were all commonly reported.

Around two-thirds of people had at least one health problem and prevalence increase with age. Ill-health affected the ability to work for one in five respondents.

Men were more likely to drink daily and experience poor memory than women. People in their 60s reported higher daily alcohol consumption than people in their 50s.

Men more frequently reported a good relationship with their partner than women. However, they were less likely to have positive relationships with their children, other family members and friends. Nearly one in ten men have no friends. People in their 60s reported better relationships with their children than people in their 50s did.

Those from BAME were twice as likely to report insufficient money to buy food or meet basic needs compared to those in the white ethnic group.

A lack of suitable transport acted as a barrier to movement for more than one in twenty people.

A binary summary measure was created for each CfAB dimension, which classified those (not)/at risk of missing-out on a good later life due to a lack of provision in that dimension. The distribution of these measures were explored. Over 40% of men in their 50s were classified as at risk of missing-out due to lack of social connections, healthy ageing, and fulfilling work. Men in their 60s were most at risk of missing-out due to lack of: good health, healthy ageing, work and health and fulfilling work. Women in their 50s were most commonly at risk of missing-out due to lack of: financial security, social connections, healthy

ageing, and fulfilling work. Women in their 60s were most commonly at risk of missing-out due to lack of: financial security, good health, healthy ageing and fulfilling work.

Compared to men, women were at higher risk of missing-out due to lack of inclusive planning and financial security. Men by contrast, were at higher than women of missing-out due to lack of work and health and healthy ageing.

Those in the non-white group were at higher risk of missing-out due to lack of social connections and affordability, and at lower risk of missing-out due to poor work and health compared to those identifying as white.

For almost every dimension, those classified as being at risk of missing-out on a good later life when compared to those not at risk were found to experience more disability, pain, depression, loneliness, lack of companionship, less wellbeing and lower life satisfaction. The exceptions were for lack of fulfilling work, which was not associated with higher odds of experiencing disability or pain and lack of work and health which was not associated with loneliness, low life satisfaction, well-being or lack of companionship. Results were similar by gender and age group.

All binary dimension variables were then included in latent class analysis and a level of risk of missing-out on a good later life (low, medium or high) was assigned to each individual. Just over a quarter of men and a fifth of women were classified as medium risk, and 18% of men and 21% of women as high-risk.

When compared to those in the lowest risk group, both those in the medium and high-risk group were more likely to experience pain, depression, and low life satisfaction. In addition, those in the high-risk group were also more likely to experience loneliness, lack of companionship and reduced wellbeing.

Those in the medium and high-risk groups were found to live on average 11 fewer years without disability (disability-free life expectancy) when compared to those in the lowest risk group.

Exploration of these likely risk factors for missing-out on a good later life highlights the inequitable distribution of health, wealth, life-satisfaction and social connections amongst men and women approaching later life in England today.

4.7.2 Understanding Society

The primary aim of the Understanding Society component of this quantitative analysis was to explore the experiences of people from BAME groups living in England today.

Compared to those in the white ethnic group, people from BAME were at risk of missing-out on a good later life across nearly every dimension of a good later life we explored. They were more likely to report poorer quality relationships with their partner, feelings of isolation and a lack of close friends compared to those who identified as white. People from BAME frequently reported not feeling safe in their communities. Nearly one in five people from these groups had avoided places in the last year due to fear/experience of being attacked. This contrasted with the one in one hundred people in the white ethnic group who have done the same.

There were marked differences in home ownership prevalence by ethnic group. BAME were much less likely to own their own home outright and were more likely to be renting than people in the white group. This disparity was most evident for those from black communities, who were more than three time less likely to own their home outright than those of white ethnicity.

The poorest group (bottom 20%) of households with respect to net adjusted income were living on £200 a week on average, whilst the richest group (top 20%) had £1000 on average at their disposal. Mean net weekly income was £100 lower for those of black ethnicity compared to white. BAME were twice as likely compared to those of white ethnicity to be struggling financially, with over half of people affected.

Those from BAME were more likely to have to endure pollution from industry or traffic and were more commonly prevented from working by their poor health than those of white ethnicity.

Heavy alcohol use was more common in the white ethnic group, whilst smoking was more common amongst the black group. Inactivity was common across all groups, with BAME being over-represented.

Just one in twenty people identifying as white reported being behind with bills, compared to nearly one in four people from BAME.

When risk was summarised for each CfAB dimension, results showed that, in general, BAME were more likely than those identifying as white to be at risk of missing-out across multiple

dimensions of a good later life. Those in the white ethnic group were at risk of missing-out due to a lack of good health, healthy ageing, and financial security. By contrast, people in the black ethnic group were at risk due to a lack of connected communities, safe and accessible housing and affordability. People in the Asian ethnic group were at additional risk due to missing-out on social connections, connected communities and work and health.

There was evidence that being at risk of missing-out on all dimensions of a good later life increased the odds of experiencing depression, loneliness and pain (with the exception of social connections for this outcome). The associations were similar for white and BAME groups. However, those of Asian ethnicity were at additional risk if they were lacking financial security; elevated odds of experiencing depression and pain were observed in this group compared to similarly at risk people from the white ethnic group.

Compared to those of black ethnicity, white men and women were more likely to be in the low risk group. Asian men were over-represented in the medium risk group and black and Asian women in the high-risk group.

Those at medium and high-risk experienced more loneliness and depression than those at low risk. In addition, people at high-risk were more likely to experience pain than those in the low risk group. There was no evidence that these associations differed by ethnicity.

This chapter highlights the stark inequality endured by BAME groups across multiple dimensions of people's lives.

5 ELSA: What commonly happens to people during these 20 years?

5.1 Research Question

To address this research question, we were guided by previous research by the Centre for Ageing Better and the Calouste Gulbenkian Foundation in 2017, which highlights a number key 'life events' during the transition to later life. From the work, we identified the events that could be explored in ELSA, including retirement, spouse's retirement, moving home, becoming a grandparent, children leaving home, relationship breakdown, bereavement (partner), becoming a carer, acquiring one or more long-term conditions, and being hospitalized. We then aimed to address the following questions:

1. What is the prevalence of people experiencing any of these key events between 2004 and 2016?
2. What are the changes in well-being, depression and financial circumstances that occur as a consequence of experiencing the event between 2002 and 2018?
3. Are recent key events (occurred between 2014 and 2016) related to the risk of missing out on a good later life?

5.2 Methods

For this question, we selected 6,890 ELSA respondents aged 50-69 at Wave 1 (2002) and we followed them up until Wave 9 (2018). Key events were tracked from Wave 2 (2004) until Wave 8 (2016), and well-being and financial outcomes were measured from Wave 1 until Wave 9.

The impact of each of the key transitions on depression, well-being (measured by CASP19 quality of life score) as well as on financial problems was addressed using piecewise linear regression models and linear mixed models. These methodologies test for changes in outcomes before and after each key-transition event. To explore admission to hospital due to a fall and separately to other causes, we used the linkage of ELSA to Hospital Episode Statistics data. Analyses were adjusted for age, sex, ethnicity and we also explored interaction terms to see if there were differences according to sex, age and ethnicity. We used the quality of life score because it was the only measure of general well-being that was available at each

wave of ELSA. The score ranges from 0 to 57, with higher scores indicating better quality of life.

5.3 Prevalence of key events

In Figure 5.1, we report the prevalence of key events experienced by men and women (combined) during the follow-up period. 70% of people had been admitted to hospital for reasons other than a fall (which was 9%). The second most common key event was spouse's retirement (36%) followed by own retirement (23%). A greater prevalence of men than women experienced retirement (27% vs 20.5%), and there was also a difference in retirement prevalence by ethnicity, with white people being more likely to retire than non-white (24% vs 10%). A small proportion of people experienced divorce/separation, becoming a carer and having a child moving out of home. Partner bereavement was experienced by 9% of people and was more common in women than men (11.9% vs 5.4%, respectively).

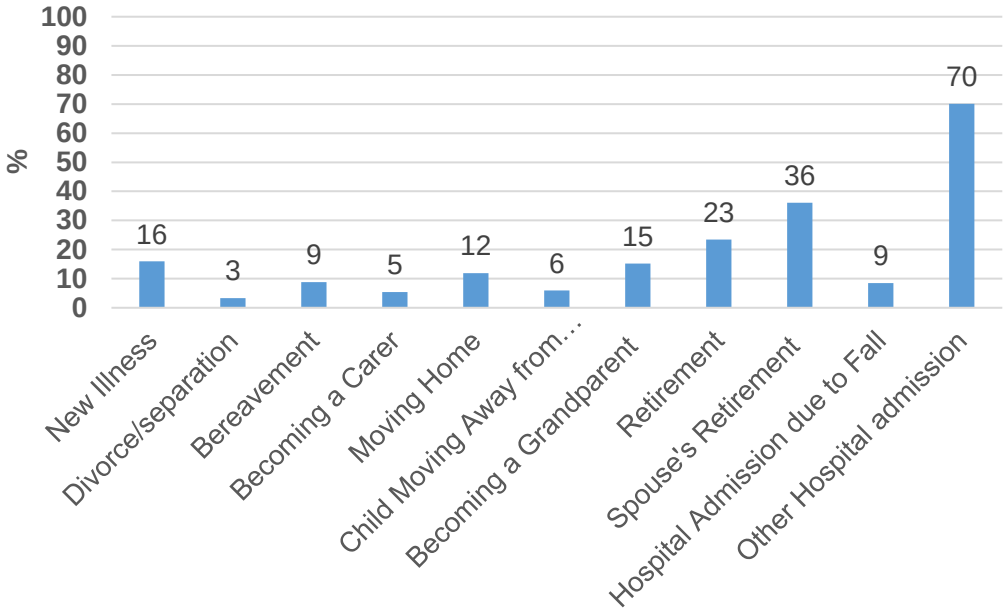


Figure 5.1 Prevalence of key events, ELSA 2002-2018

5.4 Changes in well-being and financial circumstances before and after the key life event

In this section, we describe the changes over time in depression, well-being, wealth and income, before and after the key event. We are reporting results for which we observed a significant change over time according to the key event of interest.

5.4.1 Acquiring a new long-term health condition

We found that acquiring a new long-term condition did not have a significant impact on changes in depression, well-being and financial circumstances. However, when we further explored possible age differences, we found significant changes in well-being. Figure 5.2 shows the changes overtime in the well-being score for those aged <65 at the time of the event, compared to those aged over 65. The x-axis indicates the time before and after the event. The zero indicates the time at which the event occurred. We observed that, for people experiencing the event after the age of 65, the decline in well-being was steeper than those aged below 65 at the time of the event.

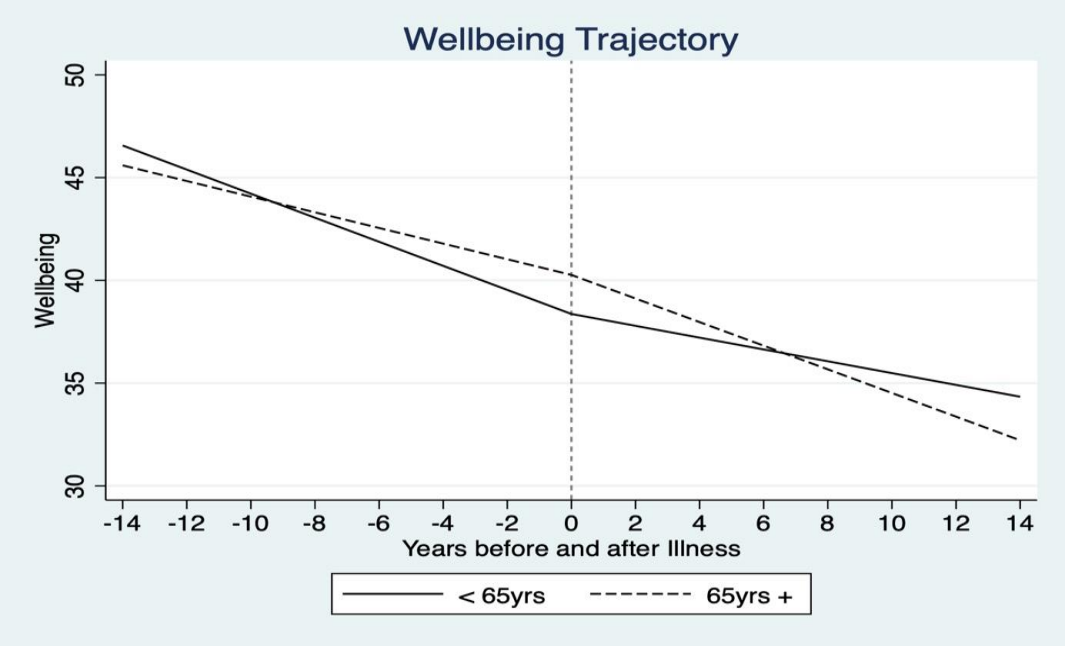


Figure 5.2 Changes in well-being before and after a new-health condition, according to the age at which the event occurred, ELSA 2002-2018

Furthermore, we explored whether those who were at risk of missing out on financial security, safe and accessible housing and social connections were more likely than others to

get a new long-term health condition. We ran a logistic regression analysis for the event "acquiring a new long-term condition between 2004 and 2018" (outcome) and each petal (exposure) separately, and adjusted for sex, age and ethnicity. Results are presented in the form of odds ratios in Figure 5.3. Those at risk of missing out on social connections were 5.7 times more likely to acquire a new long term condition than those who were socially connected. Lacking access to safe and accessible housing increased the risk of acquiring a new long-term condition by 4.8, compared to those who had access to safe and accessible housing. Lastly, the odds of acquiring a new long-term health conditions were more than 6 times higher in people at risk of missing out on financial security than those not at risk.

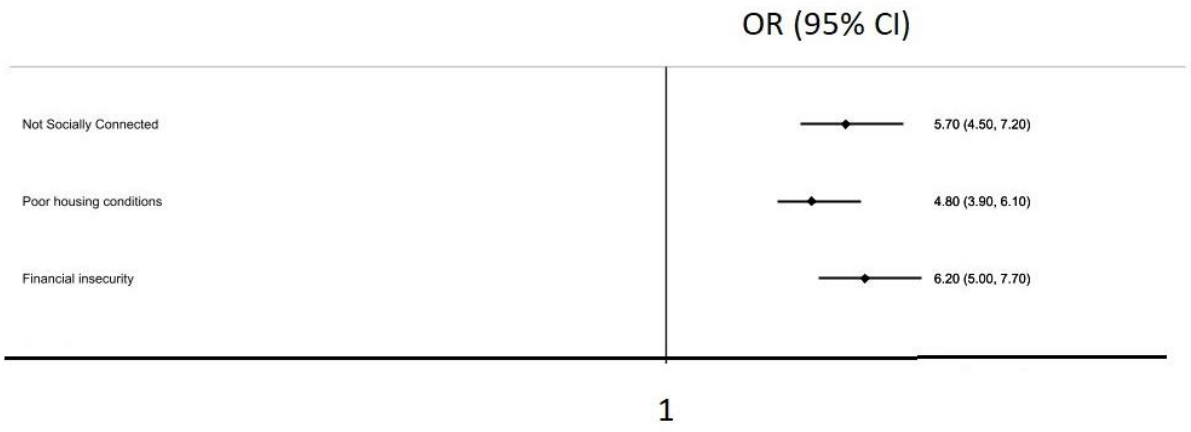


Figure 5.3 Odds ratios for the risk of acquiring a new long-term health condition, according to the risk of missing out on social connections, safe and accessible housing and financial security, ELSA 2002-2018

5.4.2 Relationship breakdown

We did not find evidence for any significant changes overtime in well-being and income for those who experienced divorce or separation. However, as reported in Figure 5.3, we observed a gradual decline in the probability of experiencing depression in the years following the relationship breakdown. The chance of having depression was 25% at the time of the event, which declined to just over 10% in the years after the event.

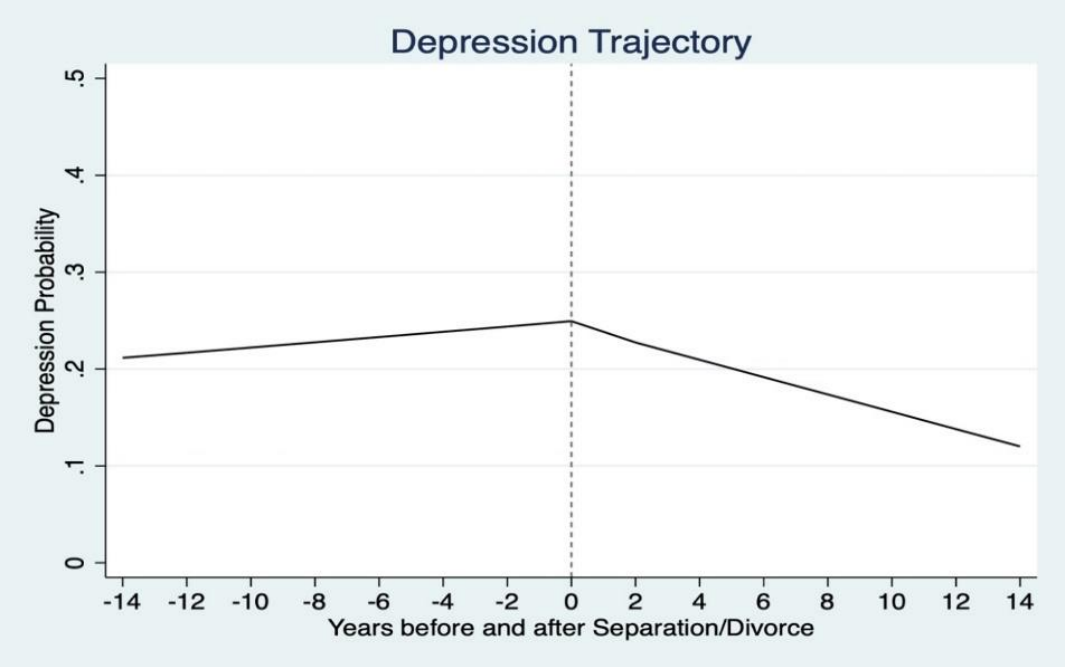


Figure 5.4 Changes in depression before and after separation/divorce, ELSA 2002-2018

Furthermore, we explored the impact of divorce/separation on depression among those who have relationships with friends, children and relatives, versus not having these relationships. We computed an indicator of social relationships as 0-1 close relationships vs 2 or more close relationships. We found a divergent trajectory of depression after separation/divorce among people who had 1 or no close relationships with others, compared to those who reported having 2 or more close relationships. As depicted in Figure 5.5, those with 2 or more close relationships were more likely to experience a decrease in the probability of having depression in the years after separation/divorce.

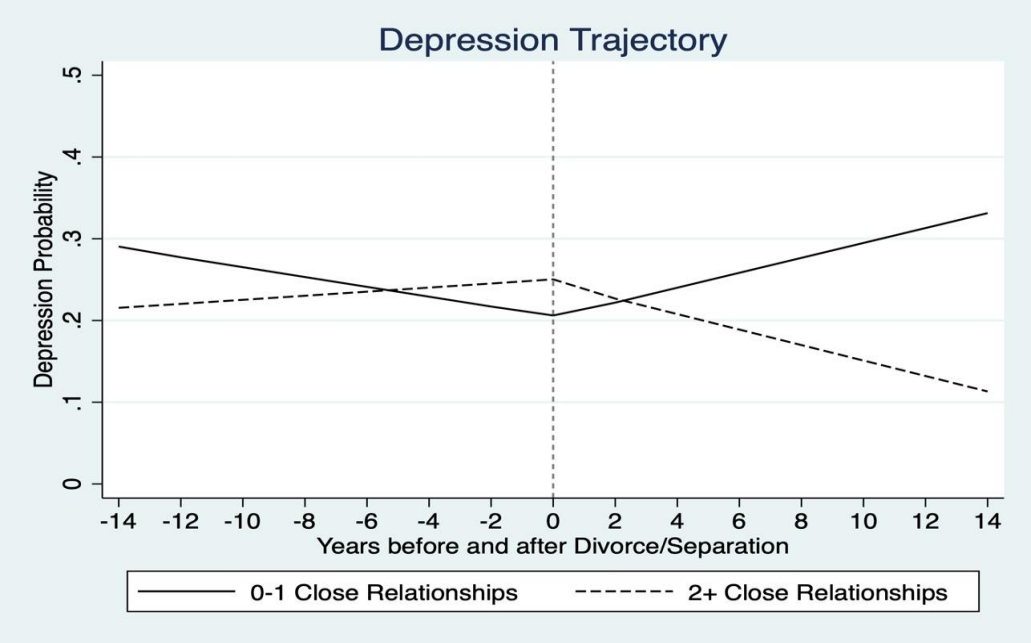


Figure 5.5 Changes in depression before and after separation/divorce, according to the number of close relationships, ELSA 2002-2018

Wealth (Figure 5.6) declined slightly (not statistically significant) up to the time of the event, and then increased significantly in the years after the separation/divorce.

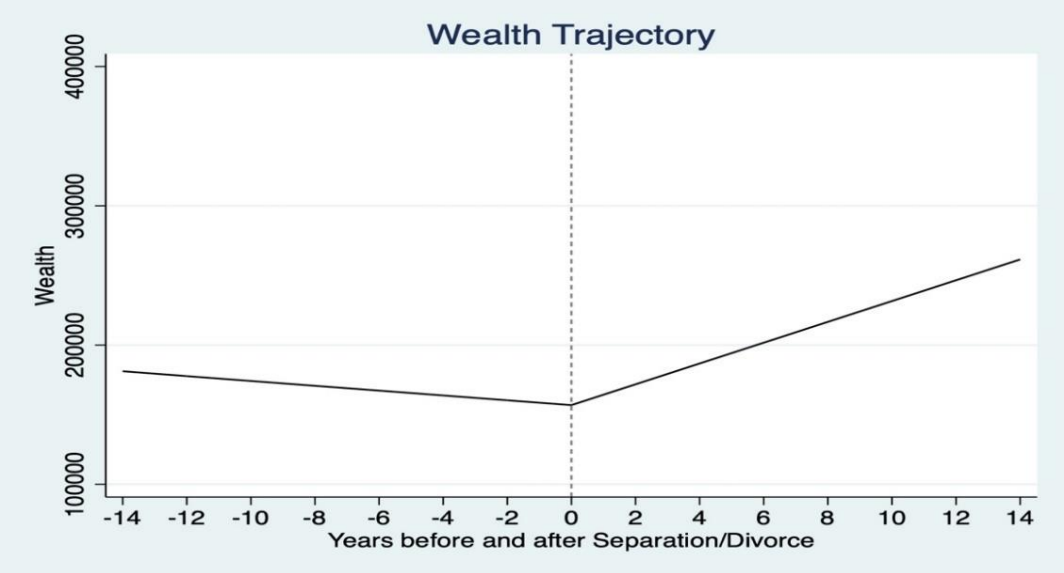


Figure 5.6 Changes in wealth before and after separation/divorce, ELSA 2002-2018

5.4.3 Bereavement

We explored changes in depression, well-being and financial circumstances before and after becoming a widow or widower. We found that up to the time of bereavement (partner|), the chance of experiencing depression increased, from less than 10% to 30% at the time of the event. In the years after the event we observed a significant decrease in depression, reaching levels as low as 10% again by the end of the follow-up period (Figure 5.7).

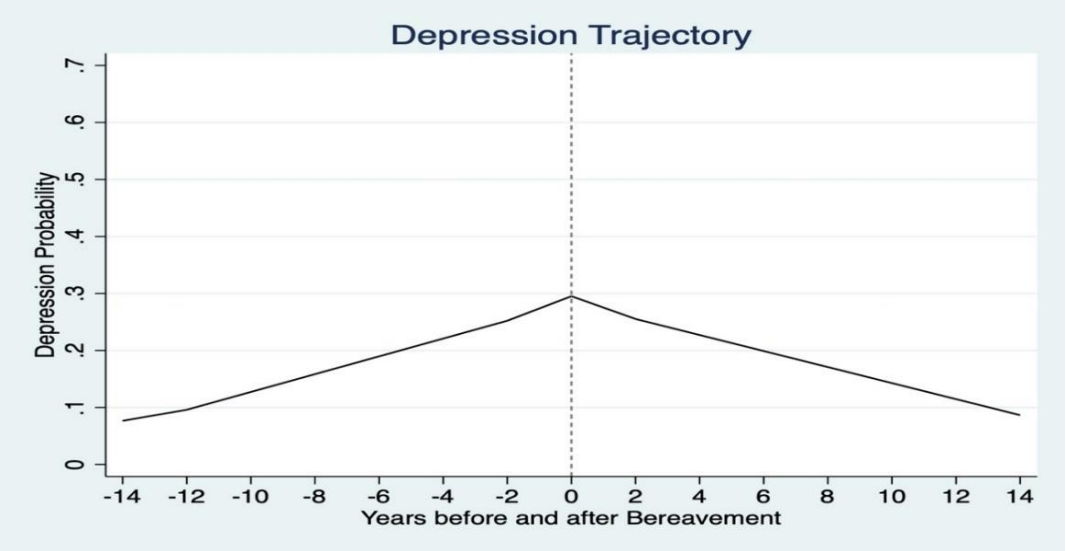


Figure 5.7 Changes in depression before and after bereavement, ELSA 2002-2018

In Figure 5.8, we report changes in well-being before and after becoming a widow or widower by the age at the time of the event. We observed an overall decline in well-being in those who were aged <65 and those aged 65 and over at the time of the event. However, in the years after the event, improvement in well-being was apparent only among those aged <65 at the time of the event; and a slight decrease was found among those aged 65 and over at the time of the event.

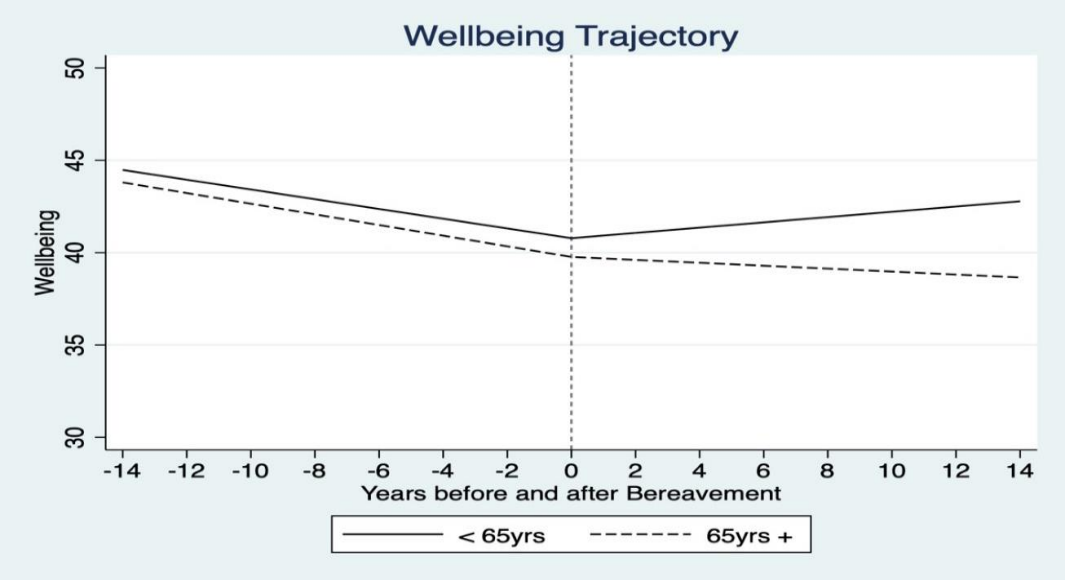


Figure 5.8 Changes in well-being before and after bereavement, ELSA 2002-2018

Lastly, we explored the changes in financial circumstances. For people experiencing the loss of a partner before the age of 65 there was a steep decline in the average weekly income: from £600 a week (on average) to approximately £300 at the time of the event. Among those who experienced the event after the age of 65, the decline in weekly income was less steep (from £400 to approximately £320). In the years following the event, we observed a steeper increase in the weekly income among those who experienced the event before the age of 65 compared to those who experienced the event after the age of 65, however, the weekly average income was only slightly above the levels reached at the time of bereavement (Figure 5.9). There were no significant differences in wealth.

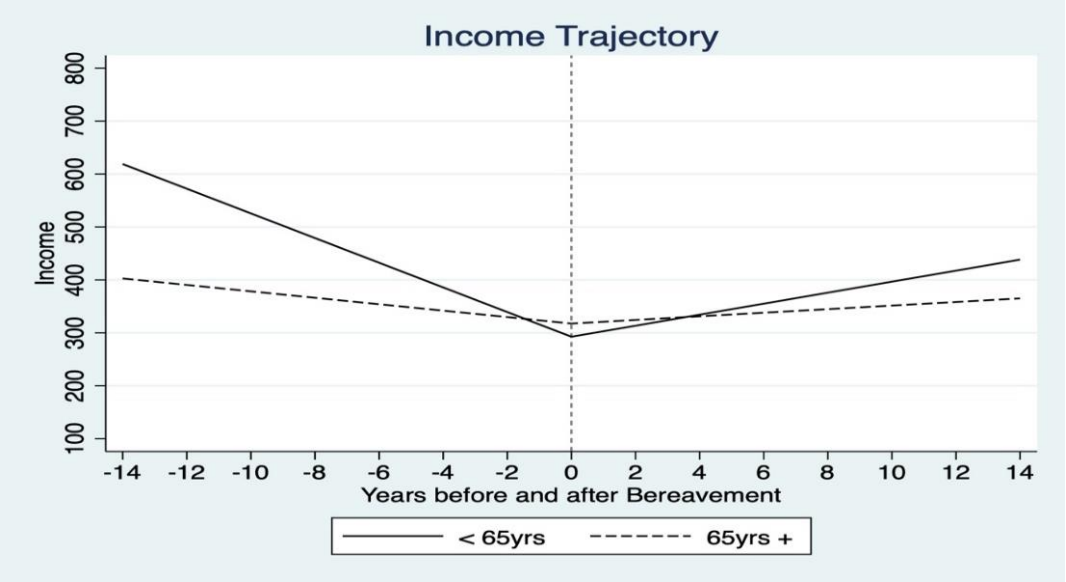


Figure 5.9 Changes in weekly income before and after bereavement by age, ELSA 2002-2018

5.4.4 Moving home

We did not find significant changes in well-being and financial circumstances before and after moving home. Nevertheless, we found that the probability of experiencing depression decreased significantly in the years after moving home (Figure 5.10).

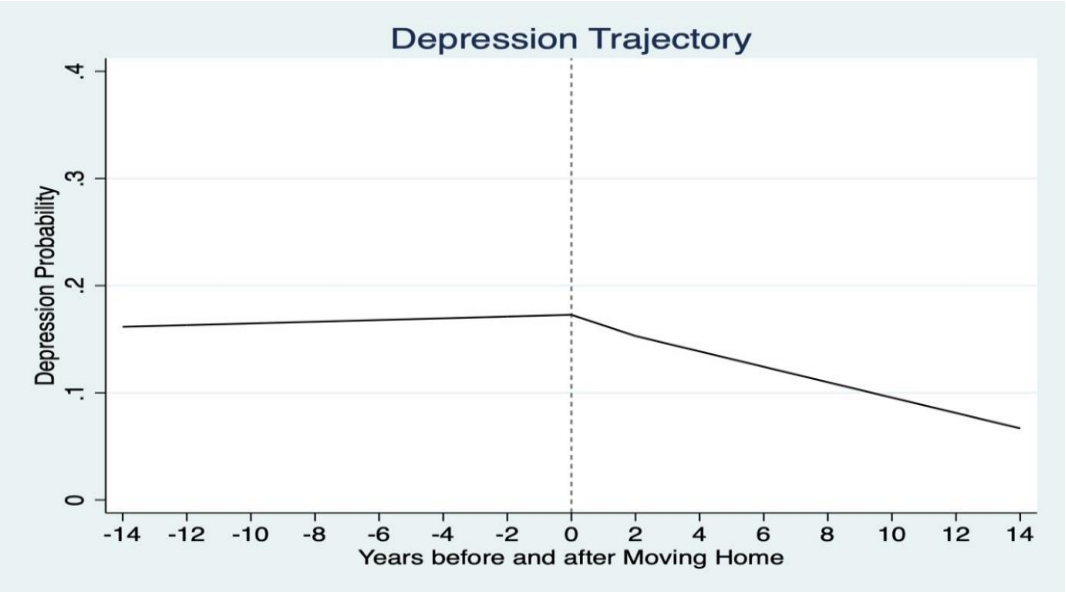


Figure 5.10 Changes in depression before and after moving home, ELSA 2002-2018

5.4.5 Becoming a grandparent

We did not find significant changes in depression and financial circumstances before and after becoming a grandparent. For well-being, we observed a steeper for those experiencing the event before the age of 65 than those aged 65 and over. Thereafter, the reverse occurred: the decline in well-being stopped for those experiencing the event before the age of 65, and became steeper among those becoming grandparents after the age of 65 (Figure 5.11).

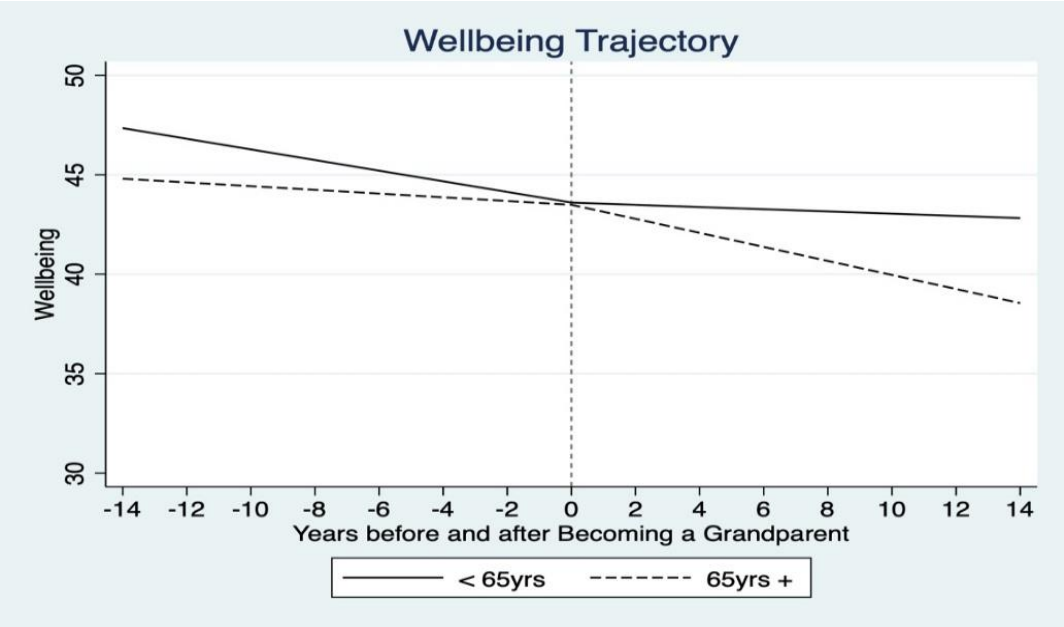


Figure 5.11 Changes in well-being before and after becoming a grandparent, ELSA 2002-2018

In addition we explored whether the wellbeing trajectory of 'becoming a grandparent' varied by gender, age at study entry (50-59 vs 60-69), wealth and the number of close relationships. We found that the trajectories of well-being were very similar by gender (Figure 5.12), with women having slightly higher quality of life scores than men. However, we did not find significant differences by age groups at study entry, wealth and how socially connected they were.

Figure 5.12 Changes in well-being before and after becoming a grandparent, by gender, ELSA 2002-2018

5.4.6 Retirement and spouse's retirement

In this section we report the trajectories of depression and income for those who had retired during the follow-up period and for those whose spouse had retired. Wealth and well-being did not change before and after these events. In Figures 5.13 and 5.14, we report the changes in depression for own retirement and spouse's retirement, by gender. Both graphs show that for men there was a steeper decline than for women in the probability of experiencing depression up to the time of the event, which continued after the event albeit non-statistically significant.

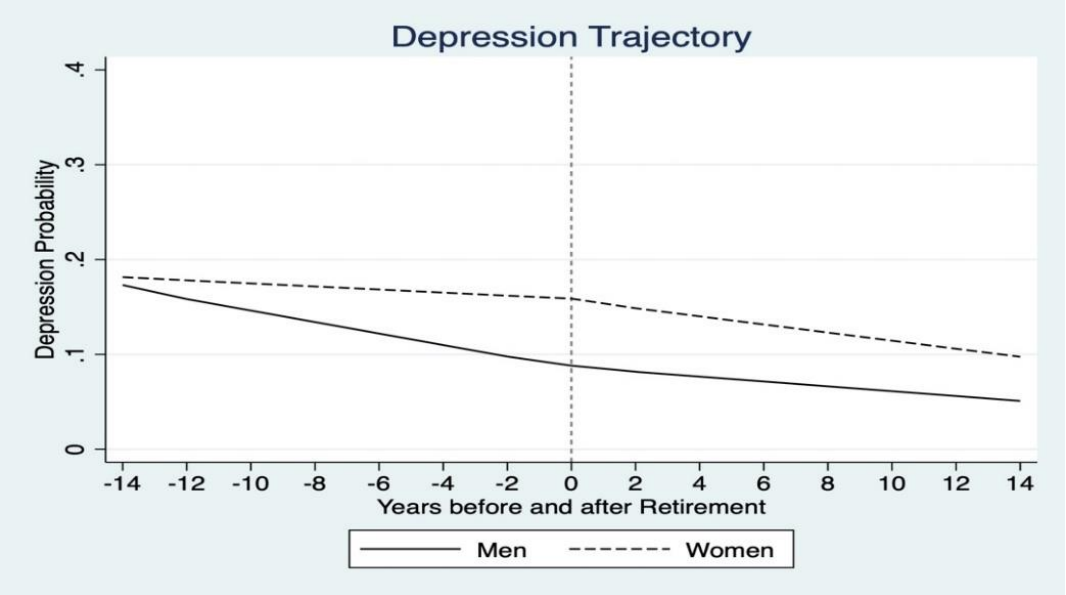


Figure 5.13 Changes in depression before and after own retirement, by gender, ELSA 2002-2018

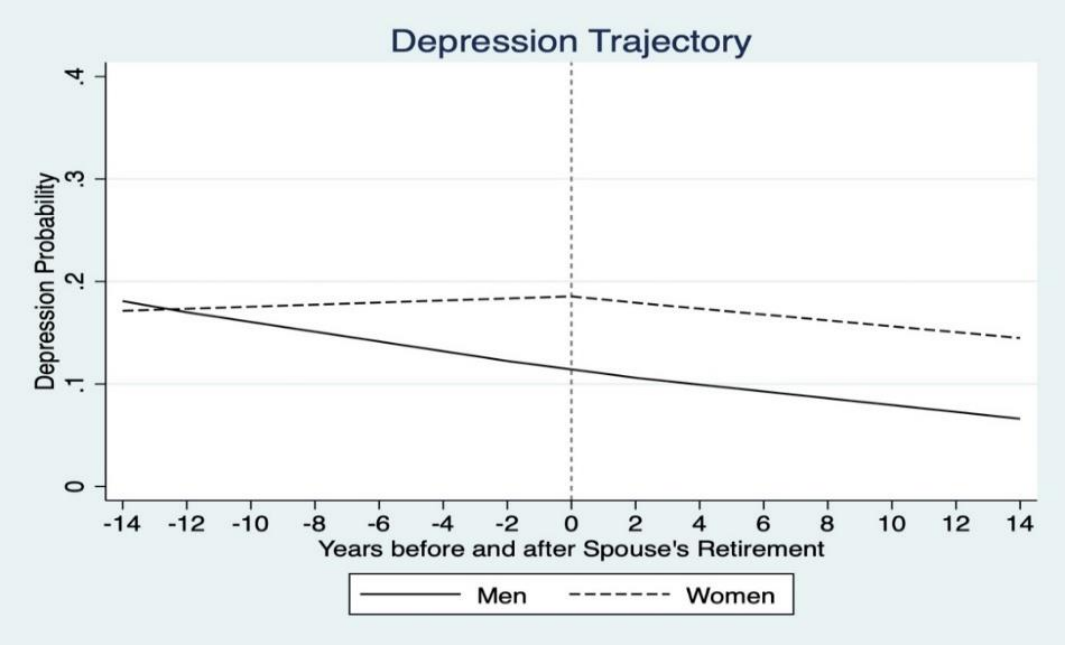


Figure 5.14 Changes in depression before and after spouse's retirement, by gender, ELSA 2002-2018

Changes in income by age at the time of the event (below 65 and above 65) are reported in Figures 5.15 and 5.16 for own retirement and spouse's retirement, respectively. For those aged <65 at the time of retirement, we observed a decrease of up to £120 (approximately) in the average weekly income up to the time of the event. Thereafter, the average weekly

income increased again up to an average of £200 a week by the end of the follow-up period. For those aged over 65 at the time of the event, we observed a slight increase in the weekly average income in the years leading up to the event, but not a significant change in the years after retirement (Figure 5.15). A similar pattern was observed for changes in weekly income before and after spouse's retirement (Figure 5.16).

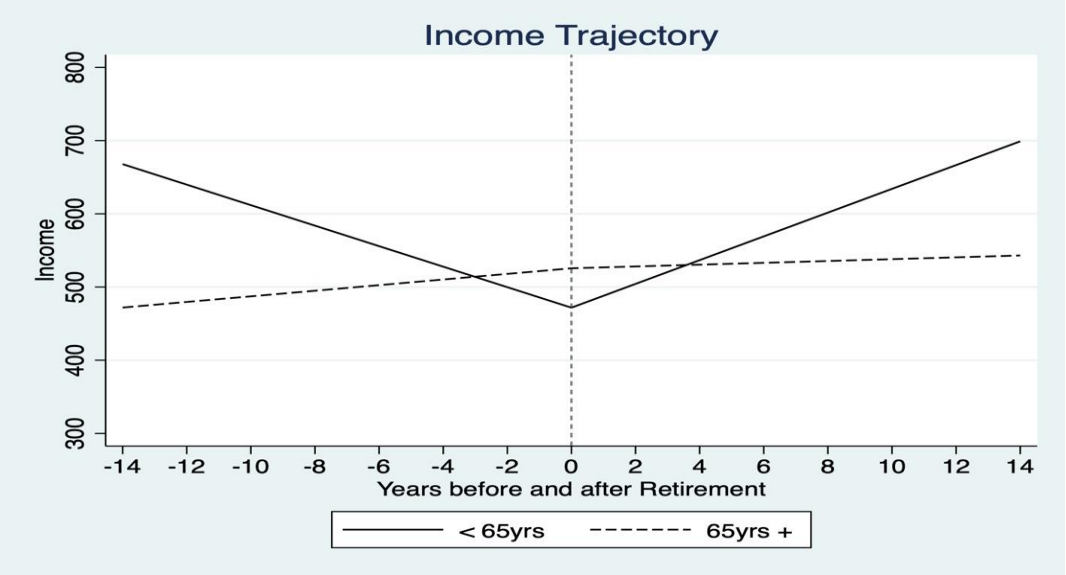


Figure 5.15 Changes in weekly income before and after retirement, by age at the event, ELSA 2002-2018

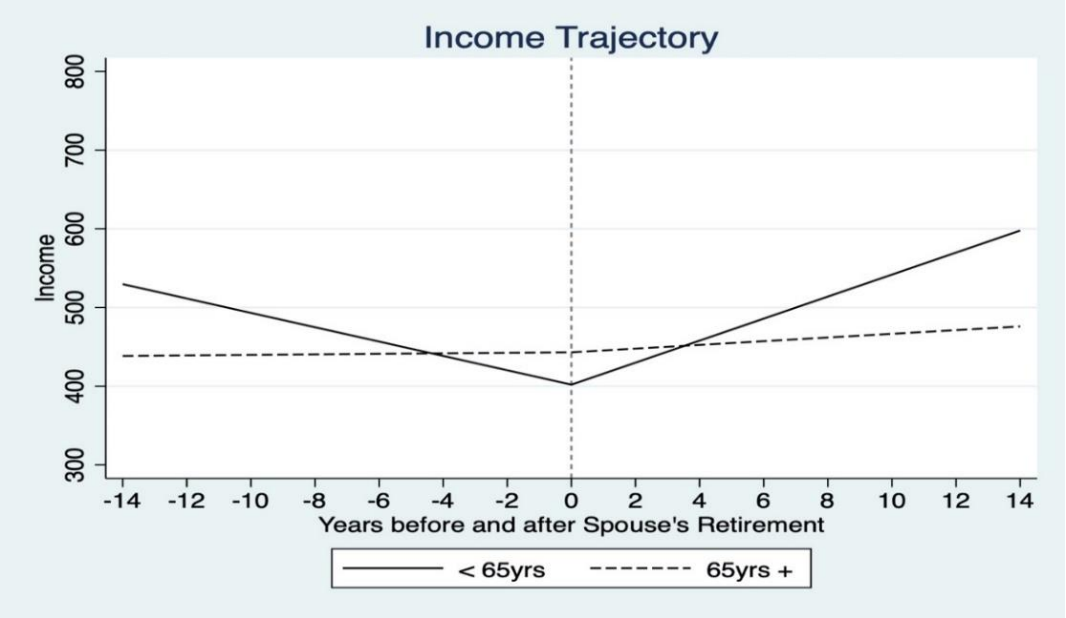


Figure 5.16 Changes in weekly income before and after spouse's retirement, by age at the event, ELSA 2002-2018

5.4.7 Hospital admission (non-fall related)

Being admitted to hospital was related to significant changes before and after the event in depression, well-being and income. Well-being declined rapidly up to the time of the event and became less steep thereafter (Figure 5.17). The probability of having depression decreased up to the time of the event and continued to decrease in the years after the event, in both men and women. In addition, throughout the follow-up period, we observed a higher probability of reporting depression in women compared to men (Figure 5.18). Lastly, the changes in average weekly income differed according to the age at which the participant was hospitalised. Those aged <65 at the time of the event experienced a steep decline in their weekly income followed by an average increase of up to £200 by the end of the follow-up period. Among those aged over 65 at the time of the event we observed a steady increase in income after the event, albeit not statistically significant (Figure 5.19).

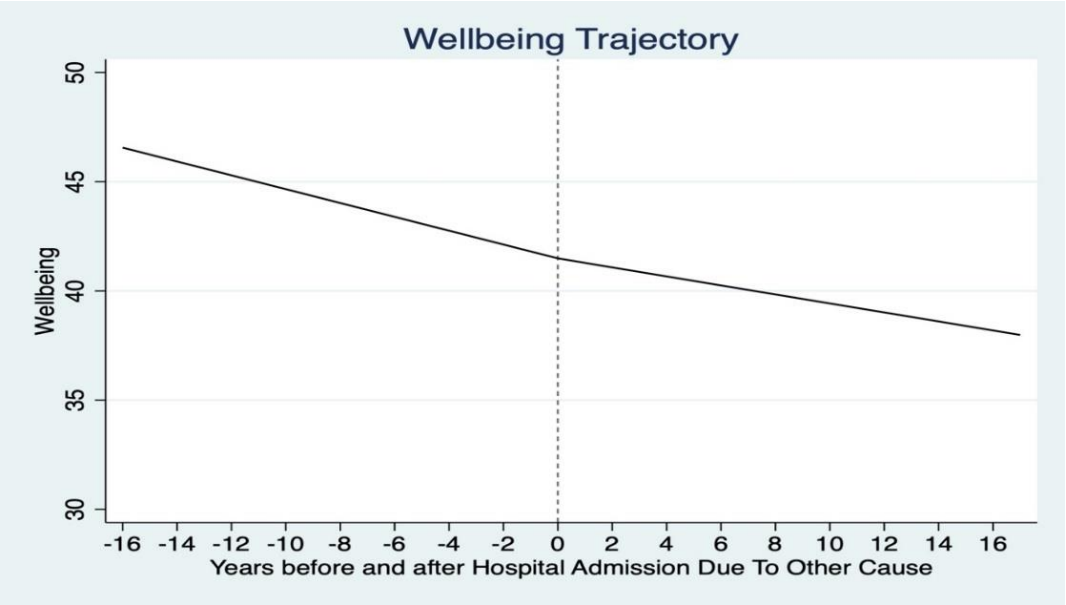


Figure 5.17 Changes in well-being before and after hospital admission, ELSA 2002-2018

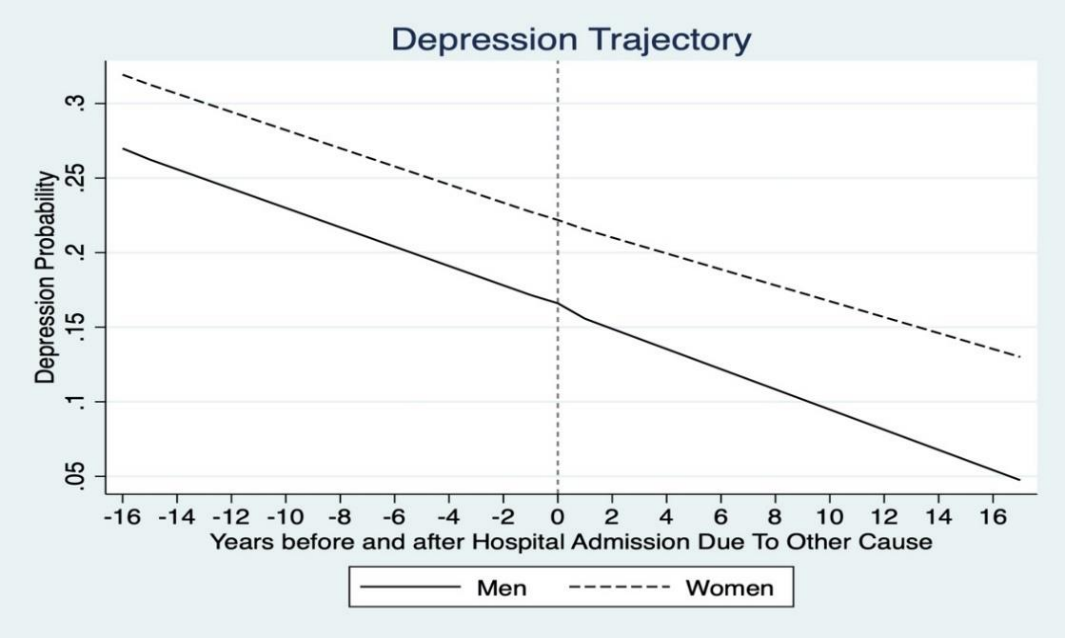


Figure 5.18 Changes in depression before and after hospital admission, by gender, ELSA 2002-2018

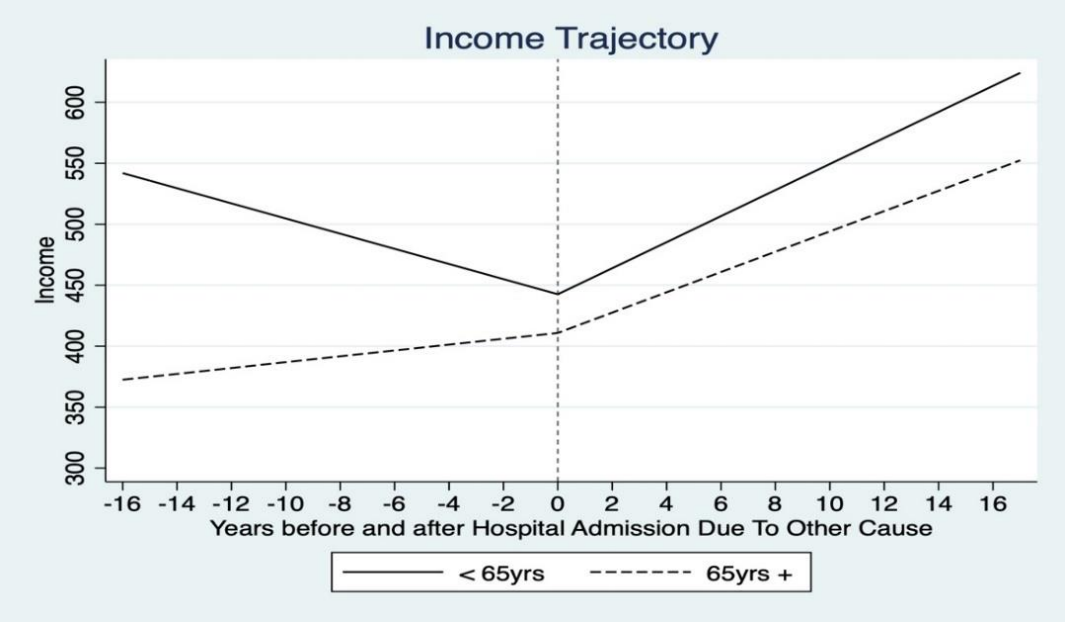


Figure 5.19. Changes in weekly income before and after hospital admission, by age at the event, ELSA 2002-2018

5.5 Recent key events (2014 to 2018)

In Figure 5.20, we report the prevalence of recent key events that occurred between 2014 and 2018. During this period, 38% of people were admitted to hospital, and this was more prevalent among white people than non-white (39% vs 25%, respectively). One in four people became a carer, an event that was also more common among women than men (31% vs 21%, respectively).

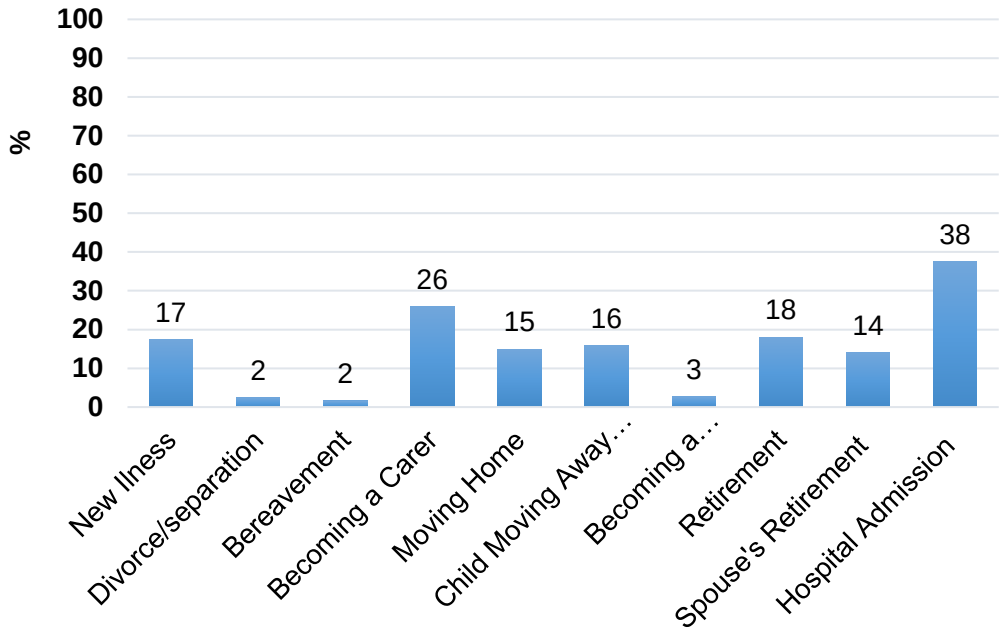


Figure 5.20. Prevalence of key events in ELSA between 2014 and 2018

Using a multinomial logistic regression model, we explored the association between each event and the likelihood of belonging to one of the good later life risk groups (adjusted for age, sex and ethnicity). We found that:

- Events such as ***hospital admission, new long-term condition, relationship breakdown, moving house*** were related to a higher chance of being in the high risk group of missing out on a good later life
- Events such as ***widowhood (men only), moving house and children leaving home*** were related to higher chance of being in the medium risk group of missing out on a good later life
- Events such as ***own retirement and spouse's retirement*** were related to higher chance of being in the no/low risk group

5.6 Summary of findings

In this chapter, we attempted to answer the question "What happens to people during these 20 years?" We selected people aged 50 to 69 who were first interviewed in ELSA in 2002 and we followed them up until 2018 to determine the prevalence of key life events. We found that the most common key event reported by 70% of participants was hospital admission (not-fall related) followed by spouse's retirement (36%) and own retirement (23%). Approximately 15% of people became grandparents and 16% of people acquired a new long-term condition. We found a difference in retirement prevalence by ethnicity, with white people being more likely to retire than non-white (24% vs 10%). Partner bereavement was more common in women than men (11.9% vs 5.4%, respectively).

We then explored the impact that each of these events had on well-being, depression and financial circumstances. We found that events such as child moving out of the home, hospital admission due to a fall and becoming a carer did not have an impact on changes in these outcomes.

Well-being (measured by CASP19 quality of life score) declined before and after acquiring a new health condition, divorce/separation, partner bereavement, becoming a grandparent (before the age of 65) and hospital admission. There was, however, an improvement in well-being after spouse's bereavement among people aged less than 65 at the time of the event. The greatest decrease was observed for acquiring a new long term condition, from 46 points at the beginning of the time period to 34 at the end, which is far below the average 43 points (SD 8.7) quality of life score reported by ELSA participants aged 50-69 in 2002. Being admitted to hospital was associated with an overall decrease in well-being of eight average points (from 46 to 38). Becoming a grandparent after the age of 65 led to a decrease in well-being of six average points (from 45 to 39).

In 2002, chance of reporting depression among those aged 50-59 was 15% for men and 20% for women (17% overall). Of the events considered, the loss of a partner yielded to the highest chance of reporting depression. The chance of experiencing depression increased from less than 10% to 30% at the time of losing a partner. In the years after bereavement, we observed a significant decrease in depression, reaching levels as low as 10% again by the end of the follow-up period. People who divorced or separated during the follow-up period experienced a decline in the chance of reporting depression in the years after the event. Furthermore, we observed a protective effect of having close relationships. After separation/divorce, people who had one or no close relationships with others experienced an

increase in the chance of reporting depression, from 21% at the time of the event to 32% at the end of the follow-up period. Conversely, those who reported having two or more close relationships reported an improvement, from 25% chance at the time of divorce/separation to 11% chance of depression at the end of follow-up.

We also explored changes in depression among those who had retired during the follow-up period and those whose spouse had retired. For both events, we found that men experienced a steeper decline than women in depression up to the time of the event, which continued after the event albeit non-statistically significant. The chance of reporting depression at the time of own retirement was 9% in men and 17% in women, and the chance of experiencing depression at the time of spouse's retirement was 11% in men and 19% in women. After moving home, we observed a reduction in depression: 18% at the time of moving home to 8% at the end of the follow-up period. Lastly, the chance of reporting depression decreased before and after hospital admission. At the time of the event, the chance of reporting depression was 22% in women and 17% in men, women reporting higher levels of depression throughout the follow-up period compared to men.

Changes in income and wealth before and after each event were also explored. Overall, from 2002 to 2018, we observed an increase in average weekly income and average wealth. For example, the average wealth among participants aged 50 to 69 in ELSA in 2002 was £231,580 and the average weekly income was £398. In 2018, those who remained in the study reported an average wealth of £503,706 and an average weekly income of £567. Changes in wealth were not influenced by the key events, with the exception of divorce/separation, for which we found a significant increase in wealth in years after the event.

Among people aged below 65 at the time of bereavement, retirement (own and spouse) and hospital admission, weekly average income decreased significantly up to the time of the event, but it then increased in the years after the event. The greatest reduction was observed for bereavement; the weekly income reduced on average £310 from the beginning of the follow-up to the time of the event, and the increase in the years after the event was, on average, up to £110.

Lastly, we wanted to explore which of the events experienced more recently (2014 and 2018) were related to the probability of being in one of the good later life risk groups. As expected, we found that health-related events, such as hospital admissions and acquiring a new illness

increased the chance of being in the high risk group. This was certainly due to the high correlation among the health measures used in the conceptualization of a good later life. However, we also found that those who had recently experienced a divorce/separation and those who moved home were more likely to be in the high risk group. Moving home was also related to a higher chance of being in both the medium risk group. Losing a partner for men and children leaving home for both men and women were related to higher chances of being in the medium risk group of missing out on a good later life. Lastly, own retirement and spouse's retirement were related to a higher chance of being in the no/low risk group.

We also explored whether certain events clustered together, and we could not find a clear pattern. Interestingly, for around 18% of people, the most recent events that occurred together were: own retirement and moving home, spouse's retirement and moving home and own and spouse's retirement. Also, approximately 17% of people experienced three or more of these events together: becoming a carer, acquiring a new health condition, moving home and hospital admission.

6 ELSA: How are the experiences of people aged 50-69 years in 2018 different from those the same age in 2002?

6.1 Research Question

This component of the project explored the question, "How do the experiences of people aged 50-69 years in 2018 differ from those the same age in 2002?"

6.2 Methods

Using data from Wave 1 (2002) and Wave 9 (2018) of ELSA, similarities and differences in the characteristics and experiences of people approaching later life (50-69 years) at the two time-points were explored. There was no overlap of individuals between time-points, i.e. no people included in the 2002 cohort were also included in 2018. The following dimensions in Wave 1 (2002) were initially described: sociodemographic factors, housing, work and retirement, caring responsibilities and geographical location (Section 6.3 tables). The distribution of these characteristics was then compared to those of people in 2018 (Section 6.3 text) to explore changes over time. Information on affordability and work and health were not collected in Wave 1, so no comparison could be made in these areas. Comorbidity and volunteering in Wave 9 (2018) were redefined to make them comparable with Wave 1 (2002), and for financial security affordability could not be included as information on resources available to meet needs was not collected in 2002 The results reported here for ELSA 2018 therefore differ slightly from those reported for research Question 2 (Section 4).

Section 6.4 further characterises the lives of people aged 50-69 years in Wave 1. This section includes tables and accompanying text summarising: fulfilling work, safe and accessible housing, good health, healthy ageing, social connections, meaning and purpose, financial security and inclusive planning and design. The results are presented by gender and age-group.

Binary variables were generated for each CfAB dimension (petal) in the 2002 dataset and prevalence compared with 2018 (Section 6.5). Findings are presented both by sex and age-group (50-59, 60-69 years) and also by sex and ethnic group (white and non-white).

The prevalence of the outcomes disability, pain and depression in Wave 1 and 9 were then explored (Section 6.6). In addition, a comparison of expectations about lifespan and chances

of being in work in future was undertaken. Percentages, means and sample sizes reported were estimated using sampling weights to enhance generalisability at population level. Key findings are summarised in Section 6.7.

6.3 Results: descriptive analysis of people aged 50-69 years in ELSA 2002 cohort (Wave 1)

There were 6,890 people aged 50-69 years who completed the ELSA interview in full in 2002 and were therefore included in this analysis.

6.3.1 Demographic characteristics

Table 6.1 explores demographic characteristics in men and women approaching later life in 2002. There were slightly more women than men (51%). This percentage was similar to that observed in people approaching later life in 2018 (52%). The average age was 60 years for both datasets.

White ethnicity was more common in 2002 than in 2018 (96% vs 92%). No evidence was found that ethnicity varied by age group in the 2002 cohort (4% in both age groups). However, in 2018, it did, with 10% of people in their 50s being of non-white ethnicity compared to 6% of people in their 60s.

Slightly more individuals approaching later life in 2002 were living with a partner (77% compared to 71% in 2018) and slightly fewer living alone (17% vs. 19% in 2018) or sharing with people other than a partner (6% compared to 10% in 2018).

The pattern of variation in household composition by age group and gender were similar between the two cohorts. Men in both their 50s and 60s in 2002 (just like in 2018) were more likely to be living with a partner than women were (81% vs. 74%). Unlike the 2018 cohort, however, there was no evidence that men in their 50s more frequently lived alone than women of a similar age (14% for both genders). In both 2002 and 2018, men in their 60s were less likely to live alone than women (16% vs. 22%). The average household size was similar in both cohorts (two people per household). Marriage was more common in 2002 compared to 2018 (75% vs 67%). Women approaching later life at both time-points were more likely than men to be separated/divorced and less likely to have never married.

Table 6.1. Demographic characteristics, ELSA 2002

	Age group (years) % (SD)*							
	50-59		60-69		50-69			
	Male	**Female**	**Male**	**Female**	**Male**	**Female**	**p-value gender difference[1]**	**All**
Gender	50	50	48	52	49	51	0.2	
Mean age (years)[2]	55	55	64	64	59	60	0.6	60
Ethnicity								
White	96	97	96	97	96	97	<0.01	96
Non-white	4	3	4	3	4	3		4
Living arrangements								
Lives alone	14	14	16	23	15	18	<0.001	17
Lives with partner	81	78	80	70	81	74		77
Lives with others[3]	5	8	4	7	5	8		6
Household size Mean (S.D.)	3 (1)	2(1)	2 (1)	2 (1)	2 (1)	2 (1)	0.4	2(1)
Marital status[4]								
Never married	9	4	7	4	8	4	<0.001	6
(Re)married	77	76	79	69	78	72		75
Separated/divorced	12	14	8	11	10	13		12
Widowed	2	6	5	16	4	11		7

* Percentage and means have been estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified [2] T-test [3] Includes family and friends [4] Married & divorced including the creation and dissolution of civil partnerships

6.3.2 Socioeconomic characteristics

Table 6.2 summarises socioeconomic characteristics of individuals included in the 2002 cohort.

There was a marked disparity in net wealth between the richest and poorest groups in 2002. It would take the average combined net wealth of over one hundred people in the poorest wealth group (bottom 20% of wealth distribution) to equal the average value of a single person in the top wealth group (richest 20%) in 2002. However, this disparity was about half the size of that seen in people approaching later life in 2018 (see Table 3.2a, Section 3.3.1). For men and women aged 50-69 years in 2002, the mean net wealth of the poorest wealth group was £5,954 (95%CI, £5,090-£6,819). This was a very similar value in absolute terms to the £6,582 (95%CI, £4,659-£8,506) average net wealth for the equivalent group in 2018. After accounting for inflation in the intervening years, however, the poorest wealth group in 2018 was around 30% poorer than the same group more than fifteen years earlier. This was in stark contrast to the difference in prosperity experienced by the top two wealth groups (richest 40% of wealth distribution), whose absolute wealth in 2018 was twice that observed in 2002.

In 2002, those in their 50s and 60s in the poorest net income group (bottom 20% of income distribution) were on average receiving a little under £100 per week. The equivalent group in 2018 received an average of £150 per week (50% higher in absolute terms). The net income of the richest two groups (top 40% of income distribution) was, however, 70% higher in absolute terms in 2018 compared to 2002 (see Table 3.2a, Section 3.3.1).

The highest level of educational qualification attained was <O-level standard for nearly half of people approaching later life in 2002 compared to around a third in 2018 (45% vs. 35%). Higher educational qualifications were less common in 2002 (13% vs. 30% in 2018). In both cohorts, women were less likely to have higher-level qualifications (post A-level) than men (10% vs. 17% in 2002 and 28% vs. 32% in 2018). The educational gender gap was greatest in those aged 60-69 years in 2002, where men were twice as likely to have post A-level qualifications (7% vs. 14%) than women.

Table 6.2. Socioeconomic characteristics, ELSA 2002

	Age Group (years) %*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value gender difference[1]	All
Quintiles of wealth [2]								**Mean Wealth[2]**
Lowest	20	21	21	19	21	20	0.1	5954
2	20	21	19	20	20	20		75718
3	19	20	19	21	19	21		143614
4	21	18	20	20	20	19		242850
Highest	19	20	20	20	19	20		690650
Quintiles of Income [3]								**Mean income[3]**
Lowest	15	20	22	27	18	23	<0.001	96
2	16	17	24	26	20	22		169
3	18	20	23	21	20	20		232
4	26	22	17	14	22	18		311
Highest	26	21	14	12	20	16		605
Education								**%**
<O-level	33	43	50	56	41	50	<0.001	45
O-level	20	26	15	20	18	23		20
A-level	28	19	20	16	24	18		21
Post A-level	19	12	14	7	17	10		13

[*] Percentages and means have been estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified. [2] Net wealth [3] Weekly net income per benefit unit

6.3.3 Housing

Table 6.3 summarises home ownership and housing problems amongst the 2002 cohort. Renting was slightly less common amongst people in their 50s and 60s in 2002 than in 2018 (17% compared to 20%). The pattern of debt free home ownership by age group was similar between time-points, occurring unsurprisingly more commonly in those in their 60s than their 50s. In 2002, 68% of women and 62% of men owned their home outright in comparison to 41% of women and 33% of men in their 50s.

Table 6.3. Home ownership, ELSA 2002

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	**Female**	**Male**	**Female**	**Male**	**Female**	**p-value gender difference[1]**	**All**
Tenure of home								
Owned outright	33	41	62	68	47	54	<0.001	51
Owned with debt	50	43	19	15	35	30		32
Renting	16	16	19	16	18	16		17

* Percentages have been estimated using sample weights & sex-specific percentages were of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified

6.3.4 Work and retirement

Table 6.4 summarises work and retirement for the 2002 cohort. More than one in twenty people aged 50-69 years were permanently unable to work due to ill-health. This was similar to the level observed in 2018. In 2002, people were less likely to report having completely retired than in 2018 (14% vs. 29%), but the percentage in paid work was similar (55% vs. 57%). The difference in reported retirement status between birth cohorts was driven by the responses of women. In the 2002 cohort, women were much more likely to report looking after the home/family than in 2018 (36% vs. just 6%).

Women in their 50s and 60s in 2002 were more likely than men to work part-time (51% vs. 12%), a similar pattern to that observed in 2018 (45% vs. 17%).

Table 6.4. Work and retirement, ELSA 2002

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value gender difference[1]	All
Retirement status								
Completely retired	4	2	33	19	18	10	<0.001	14
In paid work	79	71	40	26	60	49		55
Permanently unable to work	8	5	8	2	8	4		6
Not currently in paid work	4	1	2	0	3	1		2
Looking after home/family	5	21	17	53	11	36		24
Work hours[2]								
Full time[3]	93	55	74	27	88	49	<0.001	69
Part-time	7	45	26	73	12	51		31

* Percentages have been estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified [2] For those in work [3] Full-time was classified as ≥30 hours per week

6.3.5 Caring responsibilities

Table 6.5 summarises caring responsibilities in the 2002 cohort. Results were similar to those observed in people approaching later life in 2018. Approximately a quarter of people had recently cared for an ill/frail relative or friend and women in both cohorts were more likely to report this role.

Table 6.5. Caring responsibilities, ELSA 2002

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value gender difference[1]	All
Cares for relative/friend[2]								
No	83	69	82	72	82	71	<0.001	76
Yes	17	31	18	28	18	29		24

* Percentages have been estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] χ2-test unless otherwise specified [2] In last month

6.3.6 Geographical location

Table 6.6 summarises geographical characteristics of the 2002 sample. People in ELSA approaching later life in 2002 were widely distributed across the regions of England, irrespective of gender or age group. They had a similar regional distribution to respondents in the same age group in 2018.

Rural living was less common amongst the 2002 cohort than for those approaching later life in 2018 (13% in contrast to 22%). Unlike the 2018 cohort (where a slightly higher percentage of women lived in rural areas), there was no evidence that rural living differed by gender in 2002.

Local levels of deprivation did not differ by gender at either time-point.

Table 6.6. Geographical characteristics, ELSA 2002

	Age Group (years) %*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value gender difference[1]	All
Region								
North East	6	7	6	7	6	7	0.7	6
North West	15	14	13	13	14	14		14
Yorkshire & Humber	11	10	11	10	11	10		11
East Midlands	10	10	9	9	10	10		10
West Midlands	10	11	11	11	10	11		11
East of England	10	11	12	13	11	12		11
London	11	11	11	9	11	10		10
South East	16	17	15	17	15	17		16
South West	11	11	11	10	11	11		11
Home location								
Urban	88	87	85	86	87	86	0.7	87
Rural	12	13	15	14	13	14		13
Deprivation (IMD[2])								
Least (1)	22	23	21	22	22	23	0.4	22
2	23	23	24	23	23	23		23
3	20	20	20	22	20	21		20
4	20	20	19	17	20	18		19
Most (5)	15	15	16	15	16	15		15

*Percentages are estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1]χ2-test unless otherwise specified [2] Index of multiple deprivation-split into 1/5ths

6.4 Variables identified in ELSA for each CfAB dimension of a good later life (2002 cohort)

6.4.1 Fulfilling work

Table 6.7 summarises components of fulfilling work captured in ELSA in 2002 for people approaching later life (50-69 years). Questions regarding effort/reward imbalance and job satisfaction were not captured.

Approximately one in ten people approaching later life in 2002 reported a lack of control over their work. This contrasts with the nearly one in three people of a similar age who reported this problem in 2018.

Although excessive work demands were not uncommon in the previous cohort, they were reported less frequently than in more recent times (28% in 2002 compared to 52% in 2018).

Table 6.7. Fulfilling work, ELSA 2002

	Age Group (years) %*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Lack of control at work								
No	89	90	94	94	90	91	0.5	91
Yes	11	10	6	6	10	9		9
Excessive work demand								
No	72	75	63	72	69	74	<0.01	72
Yes	28	25	37	28	31	26		28

* Percentages are estimated using sampling weights & Sex-specific percentages are of the total number of that sex. For those in work Missing have been omitted [1] p-value for gender difference $\chi 2$-test unless otherwise specified

6.4.2 Safe and accessible housing

Table 6.8 summarises housing problems. The frequency and type of housing problems reported are very similar between cohorts. At both time points (2002 and 2018), about a third of people approaching later life reported at least one type of housing problem. Excessive noise was the most common issue experienced in both cohorts. This included both noise from the street and from neighbours. Lack of space, excess condensation, damp, cold and pollution were all commonly encountered in both cohorts. Age and gender differences were not evident with respect to housing problems for people in their 50s and 60s in either 2002 or 2018.

Table 6.8. Safe and accessible housing, ELSA 2002

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Housing problems								
None	62	62	65	66	63	64	0.8	64
Any	38	38	35	34	37	36		36
Problem type[2]								
Noisy neighbours	9	9	8	7	8	8		8
Noise from street	13	14	12	13	13	13		13
Lack of space	11	9	8	7	10	8		9
Excess condensation	4	4	4	3	4	3		4
Damp	5	3	3	3	4	3		4
Cold	5	5	4	4	4	4		4
Pollution	5	5	4	5	5	5		5
Water leaks	5	4	4	3	4	4		4
Pests	4	5	4	4	4	4		4
Other[3]	8	9	8	7	8	8		8

* Percentages have been estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] p-value for the gender difference-$\chi 2$-test unless otherwise specified [2] Of those reporting any housing problems [3] Other problems comprise: electrical, plumbing, too dark, rot or other (more than one may be present simultaneously)

6.4.3 Good health

Table 6.9 reports health characteristics by age and gender. In agreement with findings amongst people in their 50s and 60s in 2018, a quarter of people approaching later life in 2002 reported poor or fair health. In contrast to the current cohort, however, the previous cohort (2002) differed in reported poor health by both gender (26% for men vs. 23% for women) and age group (22% for people in their 50s, but 29% for men and 23% for women in their 60s).

The prevalence of limiting long-standing illness was similar between cohorts (31% in 2002 vs. 27% in 2018), although gender difference was only observed in 2002. Prevalence also increased with age in both cohorts. In 2002, prevalence in men and women aged 60-69 years was 36% and 32%, respectively, and, for those age 50-59 years, it was 28% and 29%.

Illnesses included in the definition of comorbidities for this comparison were: cardiovascular disease, mental illness, arthritis, cancer, asthma, neurological conditions, diabetes, high cholesterol and blood pressure. The presence of one or more long-term health conditions was common in both cohorts. For the purposes of this comparison, the 2018 data were recoded to ensure comparability with the conditions collected in ELSA in 2002. Comorbidity prevalence has remained stable between cohorts with approximately 60% of people approaching later life in both 2002 and 2018 reporting at least one such condition. Prevalence of comorbidity increases with age.

Hearing impairment increased with age in both cohorts of 50-69 year olds. In 2002, 16% of men and 7% of women in their 50s reported this, compared to 20% of men and 11% of women in their 60s. There was no evidence visual impairment differed by gender or age group in either cohort.

Table 6.9. Good Health, ELSA 2002

	Age Group (years) %*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Self-rated health								
(Very) good/excellent	78	78	71	77	74	77	<0.01	76
Fair or poor	22	22	29	23	26	23		24
Limiting long-standing illness								
No	72	71	64	68	68	70	0.2	69
Yes	28	29	36	32	32	30		31
Major long-term health conditions[2]								
None	52	43	36	33	44	38	<0.001	41
One+	48	57	64	67	56	62		59
Sight or hearing impairment								
None	73	79	67	77	70	78	<0.001	74
Sight	7	11	7	9	7	10		8
Hearing	16	7	20	11	18	9		13
Both hearing and sight	4	3	6	4	5	3		4

* Percentages are estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified [2] cardiovascular disease, mental illness, arthritis, cancer, asthma, neurological conditions, diabetes, high cholesterol & blood pressure

6.4.4 Healthy ageing

Table 6.10 summarises key components of healthy ageing in those approaching later life in 2002.

Cognitive testing classified 23% of men and women aged 50-69 years as having poor memory in 2018, in comparison to 39% in 2002. In both cohorts, this was more common in men than women.

The prevalence of smoking changed over time. In 2002, 22% of the cohort smoked compared to 15% in 2018. The percentage of people who had never smoked was 36% in 2002 and 45% in 2018. Fewer people reported daily alcohol consumption in the more recent cohort (16%) compared to the previous one (29%).

Levels of physical inactivity were virtually unchanged in people approaching later life over time. Overall, 13% of men and women aged 50-69 years were physically inactive in 2002, the same percentage as observed 16 years later. Women were more likely to be physically inactive than men at both time-points.

Table 6.10. Healthy ageing, ELSA 2002

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Cognitive function								
good memory (≥10 words)	65	71	48	59	57	65	<0.001	61
poor memory (<10 words)	35	29	52	41	43	35		39
Smoking								
Current	25	25	19	18	22	21	<0.001	22
Former	45	34	56	36	51	35		43
Never	30	41	25	46	27	44		36
Daily alcohol use								
No	63	78	65	78	64	78	<0.001	71
Yes	37	22	35	22	36	22		29
Physical activity								
Active	89	88	86	84	88	86	0.1	87
Inactive	11	12	14	16	12	14		13

* Percentages are estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] p-value for the gender difference-$\chi 2$-test unless otherwise specified

6.4.5 Social connections

Details of the quality of people's social connections at both time-points were compared. Information captured included details regarding relationships with partners, children, relatives and friends. In addition, organisational membership and volunteering activities were recorded.

6.4.6 Relationships

Relationships are summarised in Table 6.11.

The patterns observed at both time-points were similar with respect to relationships. Men, when compared to women, were more likely to have a partner with whom they report a good relationship. However, men in both cohorts, were less likely than women to have positive relationships with their children, relatives or friends. Around one in fifteen men had no friends. People in their 60s reported better relationships with their children than people in their 50s did.

Table 6.11. Social connections: relationships, ELSA 2002

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Partner								
Has no partner	17	19	17	28	17	24	<0.001	20
Poor relationship[2]	10	13	10	12	10	12		11
Good relationship	73	68	73	60	73	64		68
Children								
Has no children	17	10	13	9	15	10	<0.001	12
Poor relationship [2]	20	14	17	11	19	13		16
Good relationship	63	76	70	79	66	77		72
Close relatives								
Has no relatives	6	4	11	6	8	5	<0.001	7
Poor relationship [2]	39	34	40	35	40	35		37
Good relationship	55	61	49	59	52	60		56
Friends								
Has no friends	5	4	7	4	6	4	<0.001	5
Poor relationship [2]	28	16	30	19	29	17		23
Good relationship	67	81	64	77	65	79		72

* Percentages are estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] p-value for the gender difference-χ2-test unless otherwise specified [2] Either the relationship has a lot of negatives (partner perceived as: critical, unreliable, irritating or demanding) or few positives (not very: understanding, reliable if serious problem or there to open up to).

6.4.7 Organisational membership and volunteering

Organisational membership and volunteering are summarised in Table 6.12a and 6.12b. Approximately 70% of men and women in their 50s and 60s in both 2002 and 2018 reported being members of an organisation, club or society.

The 2018 definition of volunteering was amended for this part of the analysis to make it comparable with the 2002 definition, using question wpvw 2002 responses were as volunteering at least once or twice a year Approximately 20% of people in 2002 reported having volunteered in the last month compared to 14% of people in 2018. At both time-points, volunteering was more common in people in their 60s than people in their 50s. In the 2002 cohort, there was evidence that women were more likely to have volunteered in the last month than men (20% vs. 16%).

Table 6.12a. Social connections: membership and volunteering, ELSA 2002

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Club/society/organisation member								
Yes	71	67	71	70	71	68	<0.01	70
No	29	33	29	30	29	32		30
Volunteering								
Yes	15	16	18	25	16	20	<0.001	19
No	85	84	82	75	84	80		81

* Percentages are estimated using sampling weights, sex-specific & percentages are of the total number of that sex. Missing have been omitted [1] p-value for the gender difference-χ2-test unless otherwise specified

Table 6.12b. Social connections: volunteering, ELSA 2018

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Volunteering								
Yes	8	10	16	19	13	15	0.1	14
No	92	90	84	81	87	85		86

* Percentages are estimated using sampling weight, sex-specific & percentages are of the total number of that sex. Missing have been omitted [1] p-value for the gender difference-χ2-test unless otherwise specified

6.4.8 Meaning and purpose

Meaning and purpose are summarised in Table 6.13.

Men and women aged 50-69 years in 2018 were slightly more likely to report a lack of meaning in their lives than those in 2002 (9% vs. 7%). A similar trend was observed for purpose in life, with 7% of people in 2018 reporting that they seldom or never looked forward to each day, compared to just 4% in 2002.

Table 6.13. Meaning and purpose, ELSA 2002

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Life has meaning								
Often/sometimes	92	93	92	94	92	93	<0.01	93
Not often/never	8	7	8	6	8	7		7
Look forward to each day								
Often/sometimes	94	96	96	96	95	96	0.09	96
Not often/never	6	4	4	4	5	4		4

* Percentages are estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] p-value for the gender difference-χ2-test unless otherwise specified

6.4.9 Financial security

Table 6.14 summarises financial security. As previously discussed in Question 1 (Table 3.2a, Section 3.3.1) for the 2018 cohort, a huge wealth inequality was observed between the richest and poorest quintiles of people aged 50-69 years in England. This was also evident in the previous cohort in 2002. However, the gap between the richest net wealth group (top 20% of the wealth distribution) and poorest group (bottom 20%of the wealth distribution) in 2018 was twice the size of that observed in 2002.

The net income of the poorest group (bottom 20% of the income distribution) was 50% higher in the 2018 cohort than in 2002. However, net income of the richest two income groups (top 40% of net distribution) was 70% higher for people in their 50s and 60s in recent times compared to the previous cohort (see Table 3.2a, Section 3.3.1).

Unlike the 2018 data capture, people were not asked in ELSA in 2002 whether they thought they would have enough resources to meet future needs.

Table 6.14. Financial security, ELSA 2002

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	
Quintiles of net wealth								**Mean Wealth (£)[2]**
Lowest	20	21	21	19	21	20	0.1	5954
2	20	21	19	20	20	20		75718
3	19	20	19	21	19	21		143614
4	21	18	20	20	20	19		242850
Highest	19	20	20	20	19	20		690650
Quintiles of net Income								**Mean income (£)[3]**
Lowest	15	20	22	27	18	23	<0.001	96
2	16	17	24	26	20	22		169
3	18	20	23	21	20	20		232
4	26	22	17	14	22	18		311
Highest	26	21	14	12	20	16		605

* Percentages and means have been estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted 1 χ2-test unless otherwise specified. 2 Net wealth 3 Weekly net income per benefit unit 4 At any point in the last 12 months

6.4.10 Inclusive planning and design

Effective movement (transport) was used here to address the dimension of inclusive planning and design. Table 6.15 summarises access to suitable transport.

In the previous cohort in 2002, 5% of people reported that they did not have access to suitable transport when needed. This was similar in magnitude to the 7% of people who reported these problems in 2018. Women more commonly had difficulties accessing suitable transport than men did in the 2018 cohort (7% vs. 5%), a pattern not observed in the 2002 cohort (5% for both).

Table 6.15. Inclusive planning and design, ELSA 2002

	Age Group (years)%*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Access to suitable transport when needed								
Yes	95	95	94	94	95	95	0.7	95
No	5	5	6	6	5	5		5

* Percentages are estimated using sampling weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1] $\chi 2$-test unless otherwise specified

6.5 Results: Comparing the prevalence of CfAB dimension variables between people aged 50-69 years in 2002 and 2018 in ELSA

Prevalence of each binary dimension variable was compared between time-points (2002 and 2018). These are presented in this section by sex and each table is stratified by cohort and age group. These binary variables represent purported risk of missing-out on a good later life due to a lack of necessary resources in that dimension of their lives.

6.5.1 Men by cohort and age group

Table 6.16 shows the prevalence of men at risk of missing-out on a good later life for each dimension, by both cohort (2002 and 2018) and age group (50-59 years and 60-69 years).

When compared to men of a similar age in 2002, men in their 50s in 2018 were at increased risk of missing-out on a good later life due to lack of social connections (36% in 2018, vs. 26% in 2002) and fulfilling work (53% in 2018, vs. 29% in 2002). However, they were at a reduced risk of missing-out due to healthy ageing (48% in 2018 vs. 73% in 2002).

When compared to the 2002 cohort in the same decade of life, men in their 60s in 2018 were at increased risk of missing-out on a good later life due to a lack of social connections (33% vs. 24% in 2002) and fulfilling work (23% vs. 14%). They were, however, at decreased risk of missing-out due to financial security (37% vs. 43%), good health (42% vs. 48%) and healthy ageing (57% vs. 78%) compared their 2002 counterparts.

Table 6.16. Prevalence of men at risk of missing-out on a good later life due to a lack of each dimension, by cohort and age, ELSA 2002 and 2018

	Age group (years)/cohort/n								
	50-59			60-69			50-69		
	2002 n=1,728	2018 n=729	p-value for cohort difference[1]	2002 n=1,552	2018 n=972	p-value for cohort difference[1]	2002 n=3,280	2018 n=1,701	p-value for cohort difference[1]
	%*			%*			%*		
Safe & accessible housing									
Not at risk	62	66	0.2	65	66	0.8	63	66	0.2
At risk of missing out	38	34		35	34		37	34	
Fulfilling work									
Not at risk	71	47	**<0.001**	86	77	**<0.001**	78	65	**<0.001**
At risk of missing out	29	53		14	23		22	35	
Meaning & purpose									
Not at risk	89	85	0.1	90	89	0.7	89	88	0.2
At risk of missing out	11	15		10	11		11	13	
Financial security									
Not at risk	61	64	0.3	57	63	**<0.01**	59	63	**<0.05**
At risk of missing out	39	36		43	37		41	37	
Inclusive planning & design									
Not at risk	95	95	0.9	94	95	0.7	95	95	0.9
At risk of missing out	5	5		6	5		5	5	
Social connections									
Not at risk	74	64	**<0.001**	76	67	**<0.001**	75	66	**<0.001**
At risk of missing out	26	36		24	33		25	34	
Good health									
Not at risk	65	70	0.1	52	58	**<0.05**	59	63	0.1
At risk of missing out	35	30		48	42		41	37	
Healthy ageing									
Not at risk	27	52	**<0.001**	23	43	**<0.001**	25	47	**<0.001**
At risk of missing out	73	48		78	57		75	53	

*Percentages are estimated using sampling weights & Sex-specific percentages are of the total number of that sex. Missing have been omitted [1] Chi-squared test between waves (50-69 years)

6.5.2 Women by age group and cohort

Table 6.17 shows the prevalence of women at risk of missing-out on a good later life due to each dimension, by both cohort (2002 and 2018) and age groups (50-59 years and 60-69 years). There was no evidence that the prevalence of safe and accessible housing or good health differed between 2002 and 2018 for women irrespective of age groups.

Women in their 50s in 2018 were at increased risk of missing-out on a good later life due to a lack of social connections (31% vs. 20%), fulfilling work (53% vs. 23%) and inclusive planning and design (9% vs. 5%) compared to women of a similar age in 2002. More women in their 50s worked in 2018 than in 2002. Women in the current cohort (2018) were at decreased risk of missing-out on a good later life due to healthy ageing (39% vs. 62%), compared to the equivalent group in 2002.

Women in their 60s in 2018, when compared to women in their 60s in 2002, were at increased risk of missing-out on a good later life due to a lack of meaning and purpose (10% vs. 8%), social connections (31% vs. 20%) and fulfilling work (21% vs. 7%). They were, however, at a decreased risk of missing-out due to financial security (40% vs. 48%) and healthy ageing.

Table 6.17. Prevalence of women at risk of missing-out on a good later life due to each dimension, by cohort and age, ELSA 2002 and 2018

	Age group (years)/cohort/n								
	50-59			60-69			50-69		
	2002 n=1,743	2018 n=810	p-value for cohort difference[1]	2002 n=1,658	2018 n=1,052	p-value for cohort difference[1]	2002 n=3,401	2018 n=1,862	p-value for cohort difference[1]
	%*			%*			%*		
Safe & accessible housing									
Not at risk	62	62	1.0	66	68	0.4	64	65	0.4
At risk of missing out	38	38		34	32		36	35	
Fulfilling work									
Not at risk	77	47	**<0.001**	93	79	**<0.001**	85	66	**<0.001**
At risk of missing out	23	53		7	21		15	34	
Meaning & purpose									
Not at risk	91	89	0.2	92	90	**<0.05**	92	89	**<0.005**
At risk of missing out	9	11		8	10		8	11	
Financial security									
Not at risk	55	57	0.5	52	60	**<0.001**	54	59	**<0.01**
At risk of missing out	45	43		48	40		46	41	
Inclusive planning & design									
Not at risk	95	91	**<0.001**	94	93	0.4	95	92	**<0.01**
At risk of missing out	5	9		6	7		5	8	
Social connections									
Not at risk	80	69	**<0.001**	80	69	**<0.001**	80	69	**<0.001**
At risk of missing out	20	31		20	31		20	31	
Good health									
Not at risk	64	69	0.1	59	59	0.9	62	63	0.4
At risk of missing out	36	31		41	41		38	37	
Healthy ageing									
Not at risk	38	61	**<0.001**	33	52	**<0.001**	35	56	**<0.001**
At risk of missing out	62	39		67	48		65	44	

*Percentages are estimated using sampling weights & Sex-specific percentages are of the total number of that sex. Missing have been omitted [1] Chi-squared test between waves (50-69 years)

6.5.3 Men by ethnic group and cohort

Table 6.18 shows the prevalence of white and non-white men at risk of missing-out on a good later life due to each dimension in 2002 and 2018.

Non-white men in 2002 were at higher risk of missing-out on a good later life for every dimension compared to white men (with the exception of fulfilling work).

Compared to non-white men in 2002, non-white men in 2018 were at greater risk of missing-out due to a lack of fulfilling work (35% vs. 14%). However, they were at reduced risk of missing-out due to financial security (40% vs. 55%), inclusive planning (3% vs. 11%), good health (36% vs. 52%) and healthy ageing (55% vs. 84%). Nevertheless, non-white men were still at the highest risk of missing-out due to a lack of healthy ageing in 2018 when compared to any other group (white men, non-white women and white women).

Due to the small numbers of people in the non-white group, it was not possible to meaningfully compare men between cohorts by age group.

Table 6.18. Prevalence of white and non-white men at risk of missing-out on a good later life for each dimension, by cohort, ELSA 2002 and 2018

	2002		2018	
	White n=3,142	Non-white n=138	White n=1,550	Non-white n=151
	%*		%*	
Safe & accessible housing				
Not at risk	64	54	66	64
At risk of missing out	36	46	34	36
Fulfilling work				
Not at risk	78	86	65	65
At risk of missing out	22	14	35	35
Meaning & purpose				
Not at risk	89	82	87	89
At risk of missing out	11	18	13	11
Financial security				
Not at risk	60	45	64	60
At risk of missing out	40	55	36	40
Inclusive planning & design				
Not at risk	95	89	95	97
At risk of missing out	5	11	5	3
Social connections				
Not at risk	76	54	67	55
At risk of missing out	24	46	33	45
Good health				
Not at risk	59	48	63	64
At risk of missing out	41	52	37	36
Healthy ageing				
Not at risk	25	16	47	45
At risk of missing out	75	84	53	55

* Percentages are estimated using sampling weights & Sex-specific percentages are of the total number of that sex. Missing have been omitted [1] Chi-squared test

6.5.4 Women by ethnic group

Table 6.19 shows the risk of missing-out on a good later life due to each dimension for white and non-white women in 2002 and 2018.

In 2018, non-white women aged 50-69 years were at a higher risk of missing-out due to a lack of safe and accessible housing (48% vs. 41%), social connections (57% vs. 44%) and fulfilling work (43% vs. 14%) compared to non-white women in 2002. They were, however, at a lower risk of missing out in 2018 due to good health (44% vs. 55%) and healthy ageing (43% vs. 72%) compared to 2002.

Due to the small numbers of people in the non-white group, it was not possible to meaningfully compare women between cohorts by age group.

Table 6.19. Prevalence of white and non-white women at risk of missing-out on a good later life for each dimension by cohort, ELSA 2002 and 2018

	2002		2018	
	White n=3,303	**Non-white n=98**	**White n=1,726**	**Non-white n=136**
	%		**%**	
Safe & accessible housing				
Not at risk	64	59	66	52
At risk of missing out	36	41	34	48
Fulfilling work				
Not at risk	85	87	66	57
At risk of missing out	15	13	34	43
Meaning & purpose				
Not at risk	92	80	90	83
At risk of missing out	8	20	10	17
Financial security				
Not at risk	54	39	59	54
At risk of missing out	46	61	41	46
Inclusive planning & design				
Not at risk	95	92	92	89
At risk of missing out	5	8	8	11
Social connections				
Not at risk	81	56	71	43
At risk of missing out	19	44	29	57
Good health				
Not at risk	62	45	64	56
At risk of missing out	38	55	36	44
Healthy ageing				
Not at risk	35	28	56	57
At risk of missing out	65	72	44	43

* Percentages are estimated using sampling weights & Sex-specific percentages are of the total number of that sex. Missing have been omitted [1] Chi-squared test

6.6 Results: Comparing the prevalence of disability, pain, depression and future expectations between people aged 50-69 years in ELSA in 2002 and 2018

6.6.1 Disability, pain and depression

Tables 6.20a and 6.20b report the experiences of men and women approaching later life in 2002 and 2018 with respect to disability, pain and depression. Disability was defined as an inability to perform two or more of any of the activities included in the instrumental activities of daily living (IADL) and activities or daily living (ADL) combined.

The overall percentage of people with a disability was similar between cohorts (13% in 2002 and 11% in 2018). However, disability was less common in the current cohort of men and women in their 50s (8% for men and 9% for women) than it was for the cohort approaching later life in 2002 (11% for men and 13% for women). This study found no evidence of a difference in the prevalence of disability by gender (13% for men and 14% for women) in the previous cohort (2002). In the current cohort, however, there was evidence that disability was more common in women (13% for women and 10% for men). In both cohorts, disability occurred more frequently in people in their 60s than in their 50s.

The percentage of people approaching later life reporting problems with frequent pain was slightly higher in the current cohort than it was in the previous one (40% in 2018 and 37% in 2002). The prevalence of frequent pain was the same in both cohorts of men and women in their 50s (32% of men and 40% of women). It was, however, higher for people in their 60s (39% for men and 46% for women) in the current cohort (2018) than the previous (2002) one (37% for men and 41% for women). In both cohorts and age groups, women reported frequent pain more commonly than men did.

The percentage of people experiencing depression was slightly lower in the current cohort of 50-69 year olds than the previous one (19% in 2018 compared to 22% in 2002). There was no evidence of a difference in depression prevalence by age group in either cohort, with levels being almost identical for people in their 50s and 60s. Depression was more common in women than in men in both cohorts, irrespective of age group.

Table 6.20a. Disability, pain and depression, ELSA 2002

	Age Group (years) %*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Disability [2]								
No	89	87	85	85	87	86	0.3	87
Yes	11	13	15	15	13	14		13
Frequent pain								
No	68	61	63	59	66	60	<0.001	63
Yes	32	40	37	41	34	40		37
Depression								
No	80	75	80	76	80	75	<0.001	78
Yes	20	25	20	24	20	25		22

* Percentages are estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1]χ2-test unless otherwise specified [2] ADL & IADL have been combined: those unable to perform 2+ are classified as having a disability

Table 6.20b. Disability, pain and depression, ELSA 2018

	Age Group (years) %*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Disability [2]								
No	92	91	89	84	90	87	<0.05	89
Yes	8	9	11	16	10	13		11
Frequent pain								
No	68	60	61	54	64	56	<0.001	60
Yes	32	40	39	46	36	44		40
Depression								
No	84	77	84	77	84	77	<0.001	81
Yes	16	23	16	23	16	23		19

* Percentages are estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1]χ2-test unless otherwise specified [2] ADL & IADL have been combined: those unable to perform 2+ are classified as having a disability

6.6.2 Expectations

Two components of people's expectations were explored and compared between time-points. The first expectation compared was how likely people thought it was that they would be alive at a specified future age. If a person was 65 years of age or less at interview, they were asked to provide the percentage chance of them being alive at 75 years of age. If they were already over 65, they were asked how likely they thought it was that they would be alive at 80.

The second expectation compared was how likely a person thought it was that they would still be in paid employment at a future age. This was also dependent on current age at interview. If a person had yet to reach 60 years, they were asked how likely they thought it was that they would still be in working at 60. If they were over 60 but less than 65, they were asked how likely they thought it was that they would still be working at 65 years.

6.6.3 Lifespan expectations

Tables 6.21a and 6.21b highlight self-reported life expectancy in people approaching later life in 2002 and 2018. The perceived likelihood of being alive at 75/80 years was higher in the 2018 cohort of 50-69 year olds than the previous one (68% in 2018 compared to 62% in 2002). Despite this, nearly one in eight people in the more recent cohort (2018) thought there was less than 50% chance that they would reach that age. A gender difference in expectations was observed in both cohorts. In 2002, 20% of men felt they had a less than 50% chance of living that long, compared to 15% of women. In 2018, 14% of men and 10% of women responded in the same way. People in their 60s in both cohorts were less optimistic about their lifespan than people in their 50s.

Table 6.21a. Expectation of living to 75 years if ≤65 years or 80 years if >65 but ≤69 years, ELSA 2002

	Age Group (years) % (SD)*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Lifespan expectations								
≥50% [2]	82	86	77	84	80	85	<0.001	82
<50% [2]	18	14	23	16	20	15		18
Average expectation of reaching lifespan[3]								
	61(24)	65(24)	60(26)	63(24)	60(25)	64(24)	<0.001[4]	62(24)

* Percentages are estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1]χ2-test unless otherwise specified [2] Percentage chance of living to 75 years if ≤65 years or living to 80 if >65 but ≤69 years [3] The mean (standard deviation) percentage chance of living to 75/80 years (as applicable) [4] T-test

Table 6.21b. Expectation of living to 75 years if ≤65 years or 80 years if >65 but ≤69 years, ELSA 2018

	Age Group (years) % (SD)*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Lifespan expectations								
≥50% [2]	89	91	84	90	86	90	<0.01	88
<50% [2]	12	9	16	10	14	10		12
Average expectation of reaching lifespan[3]								
	68(24)	72(22)	65(23)	68(22)	66(23)	70(22)	<0.001[4]	68(23)

*Percentages are estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1]χ2-test unless otherwise specified [2] Percentage chance of living to 75 years if ≤65 years or living to 80 if >65 but ≤69 years [3] The mean (standard deviation) percentage chance of living to 75/80 years (as applicable) [4] T-test

6.6.4 Working-life expectations

Tables 6.22a and 6.22b report people's expectations regarding the duration of their working lives in 2002 compared to 2018. In the 2018 cohort, a higher percentage of people aged 50-69 years were still in the workforce compared to those of the same age in 2002 (38% compared to 27%). The more recent cohort thought it was much more likely that they would still be working (32% gave it a ≥75% chance) at the specified future age (60/65 years) than the

previous cohort did (23% gave it a ≤75% chance). This change was mostly driven by the changing responses of women in their 60s over time. Virtually no female respondents in their 60s in 2002 were still in the workforce, compared to over 50% of the same demographic in 2018. A more modest difference in responses was observed for men between the cohorts. In 2002, 27% of men thought there was ≥75% chance of them still be in work at 60/65 years. In 2018, 35% of men gave an equivalent response. The average (mean) percentage chance of being in work at the specified age differed between cohorts being 46% in 2002 and 54% in 2018.

Table 6.22a. Expectation of being in work at 60 years of age (if ≤59 years) or 65 years of age (if ≤64 years), ELSA 2002

	Age Group (years) % (SD)*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Chances of still working at 60/65 years [2]								
Not in workforce	3	2	49	100	25	50	<0.001	38
None	20	31	28	0	24	16		20
<75%	34	29	14	0	25	15		20
≥75%	43	37	9	0	27	19		23
Average expectation of still working at 60/65 years[3]								
	56(39)	25(36)	47(42)	n/a	56(39)	47(42)	0.6 [4]	46(41)

* Percentages are estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1]χ2-test unless otherwise specified [2] Self-reported likelihood of still working at 60 years of age (if ≤59 years) or still working at 65 years (if ≤ 64 years) [3] T-test [4] Mean (standard deviation) percentage chance of still working at 60/65 years (as applicable) across all respondents n/a not applicable

Table 22b. Expectation of being in work at 60 years of age (if ≤59 years) or 65 years of age (if ≤64 years), ELSA 2018

	Age Group (years) % (SD)*							
	50-59		60-69		50-69			
	Male	Female	Male	Female	Male	Female	p-value for the gender difference[1]	All
Chances of still working at 60/65 years [2]								
Not in workforce	0	1	49	47	28	27	<0.05	27
None	12	15	18	23	16	20		18
<75%	30	32	15	17	21	24		23
≥75%	58	52	18	13	35	30		32
Average expectation of still working at 60/65 years[3]								
	68(36)	63(38)	44(41)	34(39)	58(40)	51(41)	<0.01[4]	54(41)

* Percentages are estimated using sample weights & sex-specific percentages are of the total number of that sex. Missing have been omitted [1]χ2-test unless otherwise specified [2] Self-reported likelihood of still working at 60 years of age (if ≤59 years) or still working at 65 years (if ≤ 64 years) [3] T-test [4] Mean (standard deviation) percentage chance of still working at 60/65 years (as applicable) across all respondents

6.7 Summary of findings

This chapter provides a detailed comparison of multiple aspects of the lives of people in their 50s and 60s in England between 2002 and 2018. Whilst many facets of people's lives have remained unchanged over time, there are some major differences.

The most evident difference was the proportion of the population of non-white ethnicity. In 2018, the percentage was double that of 2002 (8% vs. 4%).

Those still working in the 2018 cohort more frequently reported lacking control over their work and finding their jobs excessively demanding in comparison to the previous cohort in 2002.

Wealth and income inequality were much greater for the most recent (2018) cohort of people approaching later life than was experienced by this age group in 2002.

Despite a marked disparity in net wealth between the richest and poorest groups in 2002 (top 20% were on average 100 times richer than bottom 20% of wealth distribution) this inequality had doubled by 2018. The poorest group with respect to net wealth in recent cohort were 30% poorer after accounting for inflation than the previous one. This contrasts with the difference in prosperity experienced by the richest two groups between cohorts; absolute wealth in 2018 was twice that of the same upper two quintiles of society in 2002.

In 2002, the poorest income group of people aged 50-69 years in England had an average net income of £100 per week. The same group in 2018 received £150 per week (50% absolute increase). By contrast, however, the net income of the richest two groups (top 40%) was 70% higher in 2018 compared to 2002.

The habitation arrangements of people in their 50s and 60s also differed. Those approaching later life in 2002 were more likely to be living with a partner than people the same age range in 2018.

The proportion of people aged 50-69 years renting was higher in 2018 than in 2002, but the prevalence of housing problems was very similar.

Average educational attainment was lower in 2002 than in 2018. People in the lowest group for education attainment (< O-level) comprised nearly half the population. By 2018, this group made up only about one third of the population and the number of people with a post A-level qualification had increased from one in eight to nearly one in three.

Around one in twenty people aged 50-69 years were unable to work due to long-term ill health in 2002. These numbers remain unchanged for the current cohort of people approaching later life.

One in four people in their 50s and 60s reported caring for an ill or frail relative or friend in 2002, which was almost identical to the proportion doing so in 2018. Women disproportionately undertook caring roles in both cohorts.

Living in a rural area was 10% more likely in people in the more recent (2018) cohort of 50-69 year old than it was in the previous one (2002).

The cohort of people approaching later life in 2018 had healthier habits, being less likely to smoke or drink alcohol daily than the previous cohort. They also had better cognitive function (memory) than the same age group in 2002.

Variables in each CfAB dimension were combined for each cohort to produce binary summary variables assigning risk of missing-out on a good later life due to that dimension. A number of differences were found between the cohort in 2002 and 2018.

Non-white women were at increased risk of missing-out due to a lack of safe and accessible housing and fulfilling work in 2018 compared to non-white women in 2002. These women were also at elevated risk of missing-out due to a lack of social connections. Non-white men were at highest risk of missing-out on a good later life due to a lack of healthy ageing in both 2002 and 2018 compared to all other group (white men, non-white women and white women). In 2018, compared to 2002, however, this risk for non-white men had decreased by nearly a third.

Women aged 50-69 years in 2018 were at increased risk of missing-out due to a lack of fulfilling work and social connections compared to women in this age groups in 2002.

Men in 2018 were at increased risk of missing-out on a good later life compared those in 2002 due to lack of social connections and fulfilling work.

Some differences in the prevalence of disability, pain, depression and expectation (lifespan and work duration) in people 50-69 years in 2002 and 2018 were observed.

Levels of disability were similar in the current (2018) and previous (2002) cohorts and did not differ by gender. More than one in ten people in both cohorts had a disability that impacted their ability to live independently in two or more domains. People in their 50s and

60s commonly reported experiencing frequent pain with four in ten people suffering in this way. Depression was also common, with one in five people in both cohorts meeting the criteria for clinical depression, which was more common in women.

Men were more likely to think they would die before they reached 75/80 years than women. This pattern was evident at both time-points, but expectations of life expectancy were higher in 2018 than 2002. People in the current cohort expect work to 60/65 years more commonly than the cohort before them.

This chapter finds evidence that the 2018 cohort of people aged 50-69 years live with much greater levels of wealth and income inequality than their counterparts in 2002. People in 2018 also find their work lives less fulfilling and are more at risk due to a lack of social connections and life-satisfaction.

7 Appendices

Appendix A. Variables included within each of the Centre for Ageing Better's dimension of a good later life

For research Question 2, variables relevant to each CfAB dimension of a good later life were identified. How each was generated from existing variables is presented for ELSA (Section i) and Understanding Society (Section ii). All negative values were recoded as missing unless stated.

i. ELSA

Appropriate sample weights for this cross-sectional analysis were applied: w9scwt variable for self-completed questions and w9scwt for the main survey.

Fulfilling work
Effort/reward imbalance (no, yes) The ratio of perceived work effort to perceived reward. The following variables were used **scwrkb, scwrkg, scwrkc, scwrkd, scwrke, scwrkf and scwrkj** effort - B (physically demanding) and G (heavy workload) reward - C (recognition); D (salary is adequate); E(promotion prospects are *poor*); F(job security is *poor*) and J (adequate support) For **effort** to ensure that for all variables, 4 meant higher effort or higher reward, we first reverse all values and then can calculate the mean of ***scworkb scworkg*** as the **effort** component For **reward**, we reverse the values only for C, D, and J Then generated a **reward** variable as the mean of ***scworkc scworkd scworke scworkf scworkj*** The effort-reward imbalance was then generated as the ratio: ***E/R Imbalance=effort/reward***
Lack of control at work (no, yes) This is was generated using **scworkk** (lack of control at work) and **scworkh** (lack of freedom) * we reverse coding so that high values=more control/freedom We generated a control variable which was the mean of ***scworkk & scworkh*** for an individual & then created a binary variable where the risk factors was coded 1 for lack of control ***1/2.5=1 3/4=0***
Excessive work demand (no, yes) The ***scworkl*** variable was used and recoded *Excessive work demand variable was **scworkl** which was recoded **1/2=1 3/4=0***

Safe and accessible housing

Housing problems (binary none, any for each housing type)

The following housing problem variables were reported:

hopronz hoprosn hoprosp hoprocp hoprord hoproco hopropo hoprowa hoproin other

Noisy (neighbours, street), lack of space, excess condensation, damp, cold, pollution, water leaks, pests, other

Where other was coded 1 if any of the following variables were coded 1

Hoproep, hoprodk, hoproro, hopro95

These were grouped as they were less common

An additional binary variable was also generated which identified those reporting any housing problem (if any of the variables starting ***hopron-*** above were coded 1).

Health

Self-rated health (binary: fair/poor vs. very-good/good/excellent)

This was generated by recoding the ***hehelf*** variable 1/3=0 4/5=1 to create a **self-rated health** variable coded 1 when health was fair/poor

Limited long-standing illness (no, yes)

A limited long-standing illness variable was generated from ***heill & helim***

The risk *factors was classified as taking the value 1 (yes) if both* ***heill*** *&* ***helim*** *took the value 1 for that patient*

Sight or hearing impairment (none, sight, hearing, both)

The variables ***heeye*** (visual impairment) and ***hehear*** (hearing impairment) were both recoded as binary variables:

1/3=0 4/6=1 for ***heeye***

1/3=0 4/5=1 for ***hehear***

0 "None" 1 "Sight" 2 "Hearing" 3 "Sight & hearing"

Low job satisfaction (no, yes)

Scworka was recoded to created a binary job satisfaction variable

Recoding of ***scworka*** *was* ***1/2=0 3/4=1****, to generate the low job satisfaction*

Comorbidity: major long-term health condition (none, one two)

To generated a comorbidity variable newly diagnosed conditions in wave 9 were added to those identified in previous waves and variables for many comorbidities were combined

Cardiovascular disease variables and diabetes mellitus

The following variables with the prefixes ***hedia-*** *and* ***hedaw-*** were included
The relevant accompanying suffixes comprised:
bp-blood pressure, an-angina, mi-myocardial infarct, di-diabetes, st-stroke, hf-heart failure, hm-heart murmur, ar-arhythmia, ch-cholesterol, 95-any other heart disease

Other major comorbidities

The following variables with prefixes ***hedib and hedbw-*** were included
The relevant accompanying suffixes comprised:
lu-lung disease, as-asthma, ca-cancer, ar-arthritis pd-parkinson's disease ps-pschiatric condition ad-alzheimers de-dementia bl-blood disorder ms-multiple sclerosis os-osteoporosis

Arthritis

The following variables with the suffix **hedtar-** were included:
Heartoa (osteoarthritis), heartra (rheumatoid arthritis), heartot (other types of arthritis)
The variable categories were: ***0 "No arthritis", 1 "Osteoarthritis", 2 "Rheumatoid arthritis" 3 "other kind of arthritis" 4 "Unknown"***
A binary variable for arthritis was also generate from the variable above with:
0=0 1/3=1 4=. *so that those with any type of arthritis were coded 1*
A total number of comorbidities for each patient were then generated which was the sum of the following variables:
hedtlu+hedtas+hedtca+hedtpd+hedtps+hedtad+hedtde+hedtbl+hedtms+hedtos+hedtbp+hedtan+hedtmi+hedthf+hedthm+hedtar+hedtch+hedt95+hedtdi+hedtst+arth9

Then binary variables for multi-morbidity (2+ conditions as risk factor) and complex multi-morbidity (3+ conditions as risk factor) were also generated.

Work and health
Heavy manual work (no, yes) *Variable used:* ***wpjact*** *This was* ***recoded 1/2=0 3/4=1****, with 1 being those who undertook substantial heavy manual work*
Health limits work (no, yes) Variable used: ***helwk*** No if ***hlewk*** had the value 2, yes if ***hlwek*** had the value 1 1 being ill-health/disability limits the kind/amount of paid work done if wanted
Healthy ageing
Cognitive recall (good: 10+ words, impaired: <10 words): Generated from combining the value of the two variables ***cflisen + cflisd*** A cut-off of 10 was then used to create a binary variable ***0/9=1 10/20=0*** With the risk factor of having impaired memory as remembering 9 or fewer words
Smoking Generated from the ***hesmk*** variable and ***heska*** (current smoker) variable in Wave 9 and Wave 8 smoking data ***(ff_ind_*)*** New variable coded 0 never smoked 1 for current or 2 former smoker Then a binary variable also generated to have 0 as never and 1 as ever
Daily alcohol consumption (no, yes) Variable used: ***scalcm*** This was recoded as ***3/8=0*** *vs.* ***1./2 =1*** 0 "4 or fewer times/wk", 1 "5/7 times/wk"

Physical activity (active, inactive)

This variable was generated from ***heacta*** and ***heactb*** (vigorous & moderate exercise respectively)
These are coded 1 “more than one/wk”, 2 “once/wk”, 3 “1-3x/mnth”, 4 “Hardly ever/never”
If both variables =4 then in physically inactive group (coded 1-with the risk factor)
Any other combination (i.e. moderate exercise 1-3x/mnth or more was “active” coded 0-without risk factor)

Social connections (none, poor, good relationship)

Social connections were explored in a similar way for relationships with:
partners, children, close relatives and friends.

The variables had the respective prefixes:
scprt-, scchd-, scfam-, scfrd-

For each of these prefixes there were the following suffixes:
How much in this relationship, can the other person

a- Understand the way they feel
b- Be relied on if there is a serious problem
c- Be there for them to open up to
d- Be critical of them
e- Let them down
f- Be irritating
g- Make too many demands

These were all coded 1 "A lot" 2 "Some" 3 "A little" 4 "Not at all"
These were then all recoded as binary variables with 0 (a lot/some) or 1 (a little/not at all)

For the positively worded questions
The values for **a, b and c** were added together.

A risk factor binary variable was then generated for each type of relationship from this summated score, where the relationship was considered poor quality (1, at risks) if the combined score was 2 or 3 and good quality (0, not at risk) for a combined score of 0 or 1

For the negatively worded questions a risk factor binary variable was generate for anyone who responded “a lot, 1) for any of the four questions}

The final risk variables was generated by combining the variables derived from the positively & negatively worded questions, so if either was 1 the risk variable was 1 (0 for no risk)

Clubs/society/organisation membership (no, yes)

A variable was generated from the following variables with the ***scorg-*** prefix and with suffixes:
-w -po -nw -rl -ch -ed -sc -sp -95

Volunteering (no, yes)

A volunteering variable was generated as follows with the risk factor being no volunteering (coded 1):
People are volunteering (coded 0, yes) if ***ervola*** takes a value between 1-4 or ***wpactvw*** takes the value 1
If ***ervola*** was "not applicable" (coded -1) then people were classified at risk (1, no volunteering)

Meaning and purpose

Life has meaning (not often/never vs. often/sometimes)
The variable ***scqolk*** was recoded so if it took the value 3 (not often) or 4 (never) the risk factor was present (1, life has little meaning) & 1/2were not classified at risk (0, life has meaning)
Look forward to each day (not often/never vs. often/sometimes)
The variable ***scqoli*** was recoded so if it took the value 3 (not often) or 4 (never) the risk factor was present (1, rarely look forward to each day) & 1/2were not classified at risk (0, look forward to each day)

Financial security

Net wealth (quintiles 1-5)
Variable ***nettotw_bu_s*** was split into quintiles (5 equal parts) with 1 (poorest) and 5 (richest)
Net Income (quintiles 1-5)
Variable ***eqtotinc_bu_s*** was split into quintiles 1(poorest) to 5 (richest)
Enough money to meet future needs unlikely (no, yes)
Variable ***exrslf*** used to generate a binary variable 0/55%=0 (not at risk) 60/100%=1 (at risk, not enough money). This measure is self-reported likelihood of not having enough money in future.

Affordability

Not enough money for food (never, ever) at any point in last 12 mnths
Variable ***homeal*** recoded so ***1 (at risk) 0 (not at risk)***
Not enough money for needs (yes, no)
Variable ***exrela*** used
It used a 5-point Likert Scale 1 "Never" 2 "Rarely" 3 "Sometimes" 4 "Often" 5 "Most of the time"
4/5 was classified at risk (coded 1) 1/3 not at risk (coded 0)

Inclusive planning and design

Barrier to suitable transport when needed (no, yes)
This variable was derived by combining variables as follows:
People were at risk (1, yes) if they did not have access to a car (+/- driver) when needed (variable ***Spcar=0***) & did not use public transport daily ***(sptraa=1)*** unless they stated that they did not use public transport because they didn't need to ***(sptrab7=1)***

ii. Understanding Society

Social Connections

Relationship with partner (binary: good/poor)
Quality of relationship captured; higher score=better relationship
Variable: ***Scdassat_dv 0/14=1 15/20=0***

At risk defined as a score of 14 or less

Lack of societal engagement (binary: no, yes)
Variables with prefix ***orga-*** and the suffixes ***-1/16***
A binary variable was then generated that took the value 1 (at risk) if all above variables took the value zero

Socially isolated (no, yes)
Variable generated by combing the total score for 3 variables:
Sclackcom, scleftout, scisolate (how often feels: lack of companionship, left out or socially isolated) on three point Likert Scale (hardly ever/never, sometimes, often-scores are 1,2 3)
A combined score of 3 or 4 was classified not at risk and 5/9 at risk

No close friends (no, yes)
Variable ***closenum***
Coded 1 (at risk) if ***closenum=0*** (i.e. no close friends) or coded 0 (not at risk) if closenum1+

Barriers to seeing friends (no, yes)
If people responded yes to any barriers to seeing friends apart from being too busy, the **visfrndsy**- set of variables for only those with the suffix **1/14 or 97**
This comprised: Financial reasons, illness/disability, no public transport, infrequent public transport, lack of access to available public transport, no access to car +/- driver, nowhere to go, no one to go with, attitudes of other people, fear of crowds, fear of crime, anxiety / lack of confidence, caring responsibilities or other reasons

Connected Communities

Attacked or feared attack in last year (no, yes)
Variable ***attacked*** & ***avoided***
A binary variable was created which took the value 1 if either attacked or avoided was 1

Lack of social cohesion (no, yes)
Variable ***nbrsnci_dv***
A binary variable was created by recoding ***nbrsnci_dv***, so a score <2.6 being coded 1 (at risk)

Muggings/racial attacks common (no, yes)
Variables ***crmuug*** and ***crrace*** were used

Antisocial behaviour common (no, yes)

Variables with prefix ***cr-*** and suffixes ***–graf, -rubsh, -teen, -drnk, -vand, -burg, -car***

Fulfilling work

Work satisfaction (low, medium, high)

Variable ***i_jbsat*** recoded into three levels 1/3=1 4/5=2 6/7=3(high)

Safe and accessible housing

Housing problems from traffic/industry (no, yes)

Variable ***grimy*** (already binary)

Health

Self-rated health (poor/fair vs. good+)

Variable ***Scsf1***

Recoded as a binary variable 4/5=1 1/3=0

Limiting long-standing illness (no, yes)

Variable ***health***

Existing variable coded as binary

Co-morbidity

Variable with the prefix ***hcond-*** and the suffixes **-1/20**

Variable created with: number of the above conditions a patient has

Then variables generated for multimorbidity (2+ conditions) and complex multimorb (3+)

Hearing/vision impairment

Variable ***disdif5*** and ***disdif6*** (both binary)

Above combined to give: hearing impairment, visual impairment, both

Work and Health

Long-term sickness/ill-health

Binary variable 1 if variable ***retire=3***

Healthy Ageing

Smoking (yes, no (current))

Variable ***smoking***

Binary variable 0,1

Inactivity (no, yes)

Variable ***mday***

Recoded 1/7=0, 0=1 (0 is no moderate activity)

Heavy alcohol use (no, yes)

Variables ***auditc3 auditc4***

New variable generated with value 1 if ***auditc3=5 & auditc4=2/4 or if auditc4=5***

Fruit and veg intake (>2 portions, <= 2 portions)

Variables ***fruitam, wkfruit, vegeamt, wkveg***

A variable was generated as follows ***(wkveg x vegeamt)+(wkfruit x friutam)***

This was then recoded as a binary variable 15/200=0 0/14=1

Financial Security

Tenure of home (outright, debt, renting)
Variable ***tenure_dv***
Variable recoded 4/8=3 (i.e. grouping all types of renting)

Net income quintiles (1-5)
Variable generated by dividing ***i_fihhmnnet1_dv*** by ***i_ieqmoecd_dv*** & splitting it into quintiles

Not managing financially (no, yes)
Variable ***finnow***
This variable was recoded to create a binary one ***3/5=1, 0/2=0***

Affordability

Behind with bills & housing costs (no, yes)
Variable ***Xphsdb & xphsdba***
A binary variable was then created which took the value 1 if ***xphsdb=1 or xphsdba=2/3***

Appendix B. Coding for binary risk variables for each dimension of a good later life

For each of CfAB's dimensions of a good later life, a binary risk variable (0,1) was created from the component variables in that dimension. Those classified at risk in that domain were coded 1. Variables were generated independently for ELSA and Understanding Society.

i. ELSA

Fulfilling work

If at risk (coded 1) for one or more of the 4 conditions (effort/reward imbalance, demand, control, satisfaction)

Work and health

If at risk of either heavy manual work or health prevents work

Good health

If at risk for 2+ of the following:

Multimorbidity (1+ condition), SRH, limiting longstanding illness, eyesight, hearing

Healthy Ageing

At risk for 1+ of: smoking, alcohol, inactivity and memory

Affordability

At risk of at least 1 of i) not enough money for food and/or ii) too little money to spend on needs

Meaning and purpose

Coded 1 for meaning and/or purpose

Social connections

Coded 1 (at risk) for:

-all 4 components or

- Relationships if they did not volunteer or have organisational membership

Safe housing

Any house problem

Financial security

One or more of: in the poorest quintile for wealth, poorest quintile for income or not enough money for future needs

ii. Understanding Society

Fulfilling work

Low satisfaction with work

Work and health

At risk of either

i) long-term sickness and/or
ii) health prevents work

Good health

2+ of the following:

Multimorbidity (1+ condition), SRH, limiting longstanding illness, eyesight, hearing

Healthy Ageing

One or more of: smoking, excessive alcohol, inactivity and poor diet

Affordability

Behind with bills

Social connections

Either:

1) Missing-out on all variables in this domain or
2) Lacking societal engagement if
    a. Missing-out on a good relationship with partner and/or
    b. Having no friends

Safe housing

Any problem with the house

Connected communities

One or more of the situations

Financial security

One or more of: poorest income, not managing financially, renting.