

English Longitudinal Study of Ageing

Andrew Steptoe

elsa-project.ac.uk

Primary objectives

To collect longitudinal data on health, disability, economic circumstances, social participation, and well-being, from a representative sample of the English population aged 50 and older

To explore the unfolding dynamic relationships between health and functioning, social participation, and economic position and well-being, as people plan for, move into and progress beyond retirement



Timeline

Year	Modality	Sample	Refreshment
Wave 1 (2002/3)	CAPI	12,100	HSE 1998-2000
Wave 2 (2004/5)	CAPI + Nurse visit	9,432	
Wave 3 (2006/7)	CAPI	9,771	HSE 2001-04
Wave 4 (2008/9)	CAPI + Nurse visit	11,050	HSE 2006
Wave 5 (2010/11)	CAPI	10,274	
Wave 6 (2012/13)	CAPI + Nurse visit	10,437	HSE 2009-11
Wave 7 (2014/5)	CAPI	9,666	HSE 20011-12
Wave 8 (2016/17)	CAPI + Nurse visit (50%)	8,443	
Wave 9 (2018/19)	CAPI + Nurse visit (50%)	8,736	HSE 2014-15
COVID 1 (2020) 2 (2020)	Internet + Telephone	7,040 6,794	
Wave 10 (2021/23)	CAPI/CAVI	7,242	HSE 2017-18

ELSA study features

- Multidisciplinary collaboration
 - Epidemiology, economics, psychology, sociology, clinical medicine, biology
- Representative sample
 - Representative geographically and demographically of people living in England aged 50 and over
- Open access
 - Data deposited in accessible archives within 8-12 months



ELSA organisation

- Department of Epidemiology and Public Health, UCL Steptoe, Marmot, Zaninotto
- Institute for Fiscal Studies Banks, Blundell, Cribb, Oldfield,
- Department of Sociology, University of Manchester Nazroo
- Norwich Medical School, University of East Anglia Steel
- NatCen Social Research

Wood, Taylor, Lloyd



ELSA measures

Demographic data

- Household membership
- Living relatives
- Marital status
- Ethnic group
- Country of birth
- Education
- Occupation of main carer when respondent was aged 14 years
- Proximity to closest child & grandchildren
- Citizenship

Income and assets

- Earnings
- Sources of income
- Pensions (private, state, contributions, etc
- Financial and physical assets
- Housing wealth and mortgage debt
- Business wealth
- Debt
- Life insurance
- Lifetime inheritances and gifts
- State pension deferral
- Attitudes to financial risk



Employment and consumption

Employment

- Employment situation
- Job details
- Health limiting ability to work
- Retirement and reasons for retirement
- Job security
- Part-time working
- Place of work, travel to work

Consumption

- Housing and housing problems
- Vehicle and durables ownership
- Household outgoings/expenditures
- Transfers (charity, children)
- Clothing, leisure,
- transport expenditure
- Electronic banking



Future expectations and cognition

Expectations

- Survival
- Future health
- Employment
- Retirement
- Finance and future income
- Bequests and inheritances
- Housing situation
- Future housing and care needs

Cognitive Function

- Subjective and objective memory
- Executive function
- Numerical ability, literacy
- Fluid intelligence
- Proxy interview of cognitive functioning
- HCAP



Social and civic activity and participation

Social and civic participation

- Informal caregiving
- Volunteering/unpaid help
- Social networks/isolation
- Social clubs, organisations
- Social support
- Loneliness
- Use of Transport
- Social capital

- Accessing local amenities and services
- Perceptions of neighbourhoods
- Social and cultural participation
- Provision of grandparental child care
- Internet access and use
- Perceived discrimination
- Religiosity
- Time use yesterday



Psychosocial measures

Psychosocial factors

- Control and demand
- Effort-reward balance
- Subjective social status
- Relative deprivation and perceived financial difficulties
- Ages at which middle age ends and old age begins
- Self-perceived and desired ages
- Experience and perceptions of ageing

- Altruism, generativity
- Sense of collectiveness
- Pet ownership
- Experiences of mentoring
- Personality



Health measures

Physical Health

- Self-rated health
- Mobility
- Sensory function (hearing, eyesight)
- Physician diagnosed conditions
- Falls/balance
- Chronic pain
- Quality of health care
- Activities of daily living
- Diagnostic symptom assessments: Rose Angina, MRC respiratory questionnaire, Edinburgh claudication questionnaire

- Hip, knee replacement
- Incontinence
- Social prescribing
- Cancer screening
- Dental health
- Polypharmacy
- Menopause
- Sensory function (taste, smell)
- Objective hearing test
- COVID-19, Long-COVID
- COVID vaccination



Mental well-being and health behaviour

Behavioural health

- Smoking/smoking history
- Alcohol consumption
- Physical activity (leisure, work)
- Consumption of fruit and vegetables
- Body weight
- Sleep duration and sleep disturbance
- Nutrition
- Sexual attitudes and behaviour
- Food poverty
- E-cigarettes

Mental health

- Psychiatric and emotional problems
- General Health Questionnaire (GHQ-12)
- CES-D depression scale
- Anxiety

Psychological well-being

- Quality of life (CASP-19)
- Satisfaction With Life
- Positive affect
- ONS wellbeing scales



Biomarkers and physical performance measures

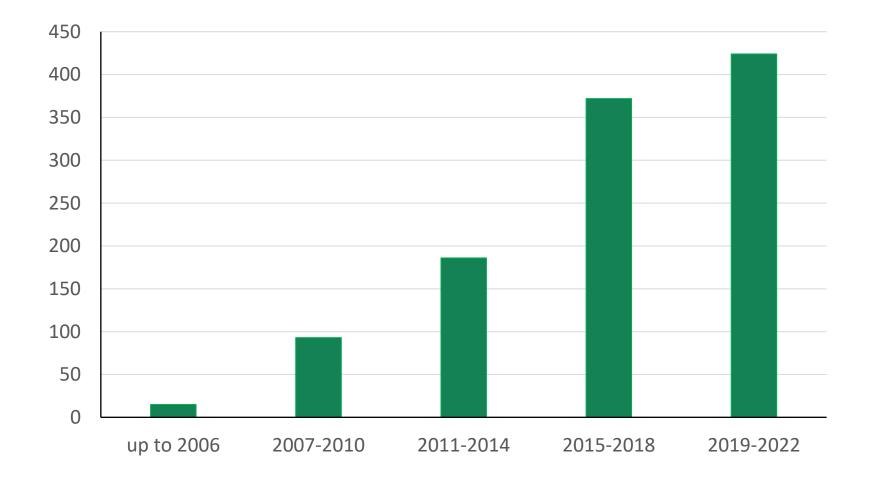
Wave 2 (2004/5)	Wave 4 (2008/9)	Wave 6 (2012/13)	Wave 8/9 (2016/19)
Weight, height, waist	Weight, height, waist	Weight, height, waist	Weight (in main interview) Waist (nurse visit)
Grip, balance, chair rise, tandem stand, leg raise, timed walk	Grip, balance, chair rise, tandem stand, leg raise, timed walk	Grip, balance, chair rise, tandem stand, leg raise, timed walk	Grip Timed walk
Blood pressure, lung function	Blood pressure, lung function	Blood pressure, lung function	Blood pressure
Lipids, triglycerides, HbA1c, glucose	Lipids, triglycerides, HbA1c, glucose	Lipids, triglycerides, HbA1c, glucose	Lipids, triglycerides HbA1c, glucose
C-reactive protein, fibrinogen	C-reactive protein, fibrinogen, white blood cell count	C-reactive protein, fibrinogen, white blood cell count	C-reactive protein, fibrinogen, white blood cell count
Haemoglobin, ferritin	Haemoglobin, ferritin	Haemoglobin, ferritin	Haemoglobin, ferritin
DNA	(DNA)	(DNA)	
	IGF-1, DHEAS	IGF-1, Vitamin D	IGF-1, Vitamin D
Apolipoprotein E		Cortisol, DHEA, cortisone, testosterone, progesterone (hair)	PAXgene tubes

Special features of ELSA

- Genetic data and polygenic risk scores
- Sexual attitudes and behaviour module (twice)
- Comprehensive nutritional assessment in 2018/19
- Harmonized Cognitive Assessment Protocol (HCAP)
- Two waves of data collection during the COVID-19 pandemic
- COVID-19 seropositivity (April/May 2021)
- Accelerometry in 2022/23
- Proteomics and metabolomics in subsamples



Growth of ELSA scientific outputs





ELSA involvement in policy

- Evidence to Parliamentary committees
- Briefings to central Government Departments: HM Treasury; Health and Social Care; Work and Pensions; Transport; Levelling Up, Housing and Communities; Digital, Culture, Media and Sport
- Work with Arm's Length Bodies: Centre for Ageing Better; Office for National Statistics
- Charities: Age UK; International Longevity Centre
- International: US National Academy of Sciences; Organisation for Economic Co-operation and Development (OECD); U.S. Surgeon General; EU DGs



Funding of ELSA

- Department of Health and Social Care
- Department for Work and Pensions
- Department for Transport
- National Institute for Health and Care Research
- Department for Education and Skills
- Department for Environment, Food and Rural Affairs
- HM Treasury
- Office for National Statistics
- Economic and Social Research Council
- National Institute on Aging



Structure of the conference

- Inequalities in later life
- Cross-national comparisons of ageing
- Experience during the COVID-19 pandemic
- Cognitive decline and dementia
- Economic activity and ageing
- Future plans





The significance of inequalities in later life Lessons from twenty years of ELSA

James Nazroo University of Manchester, UK

Sociology Cathie Marsh Institute Manchester Urban Ageing Research Group

james.nazroo@manchester.ac.uk

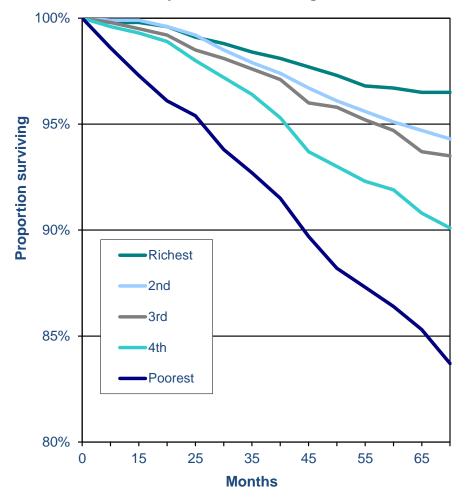






 Inequalities in later life are present in relation to any domain we focus on: health and wellbeing; employment, retirement and pensions; social engagement; citizenship and digital exclusion; engagement in caring roles, etc. There is nowhere where we do not see the outcomes of inequality.





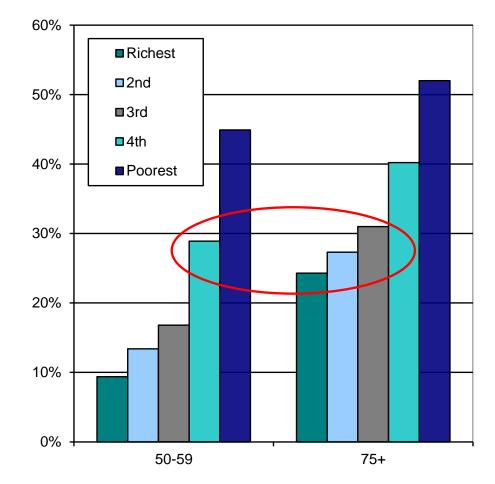
Survival by wealth: women aged 50 or older





 Inequalities in later life are present in relation to any domain we focus on: health and wellbeing; employment, retirement and pensions; social engagement; citizenship and digital exclusion; engagement in caring roles, etc. There is nowhere where we do not see the outcomes of inequality.

Fair/poor health by wealth and age: men

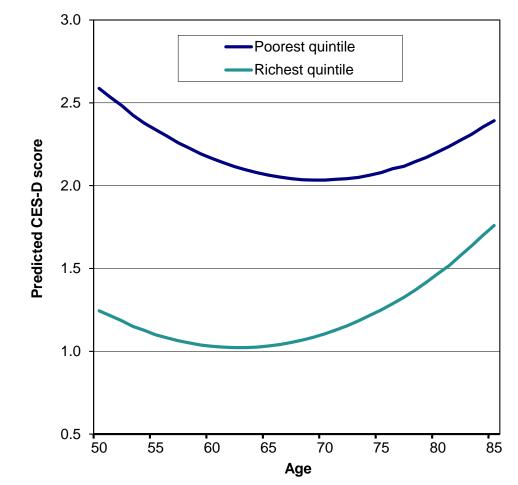






 Inequalities in later life are present in relation to any domain we focus on: health and wellbeing; employment, retirement and pensions; social engagement; citizenship and digital exclusion; engagement in caring roles, etc. There is nowhere where we do not see the outcomes of inequality.

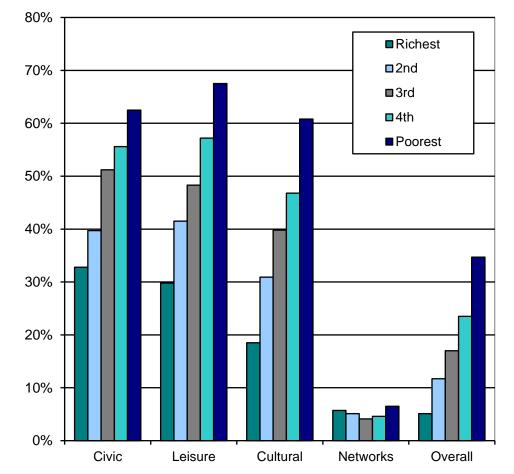
Age, wellbeing and wealth





 Inequalities in later life are present in relation to any domain we focus on: health and wellbeing; employment, retirement and pensions; social engagement; citizenship and digital exclusion; engagement in caring roles, etc. There is nowhere where we do not see the outcomes of inequality.





Social detachment and wealth

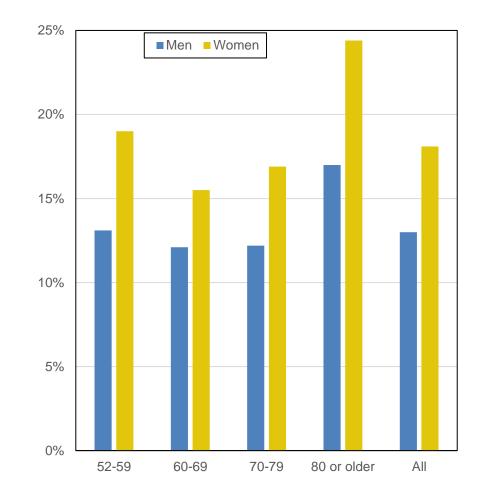




INEQUALITIES IN LATER LIFE: EXPANDING THE FOCUS

- Inequalities in later life are present in relation to any domain we focus on: health and wellbeing; employment, retirement and pensions; social engagement; citizenship and digital exclusion; engagement in caring roles, etc. There is nowhere where we do not see the outcomes of inequality.
- Inequalities have been thoroughly documented in relation to socioeconomic position, to a more limited extent in relation to gender, and, although much less thoroughly documented, they are also striking in relation to ethnicity, sexual identity and sexuality, etc.

Probable depression by gender and age



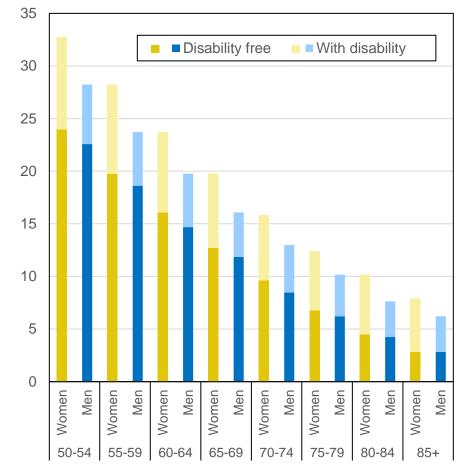




INEQUALITIES IN LATER LIFE : EXPANDING THE FOCUS

- Inequalities in later life are present in relation to any domain we focus on: health and wellbeing; employment, retirement and pensions; social engagement; citizenship and digital exclusion; engagement in caring roles, etc. There is nowhere where we do not see the outcomes of inequality.
- Inequalities have been thoroughly documented in relation to socioeconomic position, to a more limited extent in relation to gender, and, although much less thoroughly documented, they are also striking in relation to ethnicity, sexual identity and sexuality, etc.



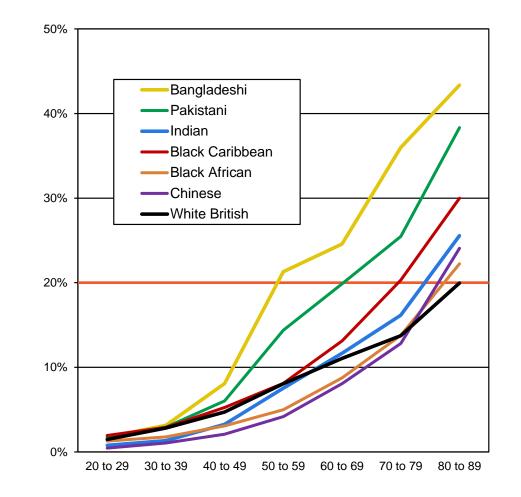




INEQUALITIES IN LATER LIFE : EXPANDING THE FOCUS

- Inequalities in later life are present in relation to any domain we focus on: health and wellbeing; employment, retirement and pensions; social engagement; citizenship and digital exclusion; engagement in caring roles, etc. There is nowhere where we do not see the outcomes of inequality.
- Inequalities have been thoroughly documented in relation to socioeconomic position, to a more limited extent in relation to gender, and, although much less thoroughly documented, they are also striking in relation to ethnicity, sexual identity and sexuality, etc.

Bad or very bad health by ethnicity and age

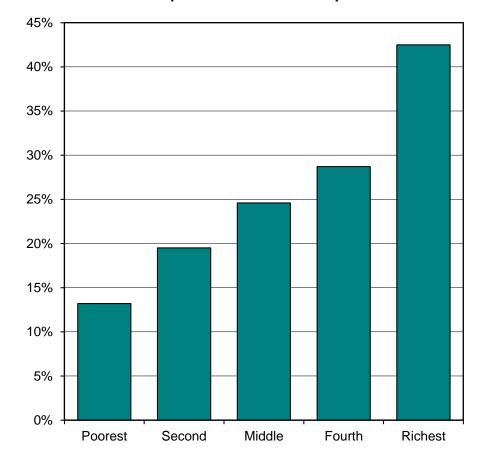






INEQUALITIES IN LATER LIFE: EXAMINING THE LIFE COURSE AND LATER LIFE EVENTS

- Inequalities in later life are present in relation to any domain we focus on: health and wellbeing; employment, retirement and pensions; social engagement; citizenship and digital exclusion; engagement in caring roles, etc. There is nowhere where we do not see the outcomes of inequality.
- Inequalities have been thoroughly documented in relation to socioeconomic position, to a more limited extent in relation to gender, and, although much less thoroughly documented, they are also striking in relation to ethnicity, sexual identity and sexuality, etc.
- Processes that operate across the life course are crucially relevant to these inequalities: critical periods, transition points, trajectories and accumulation. But what happens in later life is also relevant – retirement, partnership change, caring roles, new opportunities for volunteering and for leisure pursuits, etc.



Proportion who volunteer by wealth

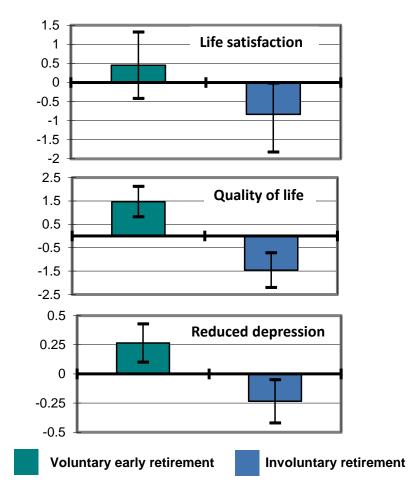




INEQUALITIES IN LATER LIFE: EXAMINING THE LIFE COURSE AND LATER LIFE EVENTS

- Inequalities in later life are present in relation to any domain we focus on: health and wellbeing; employment, retirement and pensions; social engagement; citizenship and digital exclusion; engagement in caring roles, etc. There is nowhere where we do not see the outcomes of inequality.
- Inequalities have been thoroughly documented in relation to socioeconomic position, to a more limited extent in relation to gender, and, although much less thoroughly documented, they are also striking in relation to ethnicity, sexual identity and sexuality, etc.
- Processes that operate across the life course are crucially relevant to these inequalities: critical periods, transition points, trajectories and accumulation. But what happens in later life is also relevant – retirement, partnership change, caring roles, new opportunities for volunteering and for leisure pursuits, etc.
- Such inequalities are increasingly the focus of centrally driven research and policy agendas.
- What do we need to pursue these agendas?

Retirement route and wellbeing



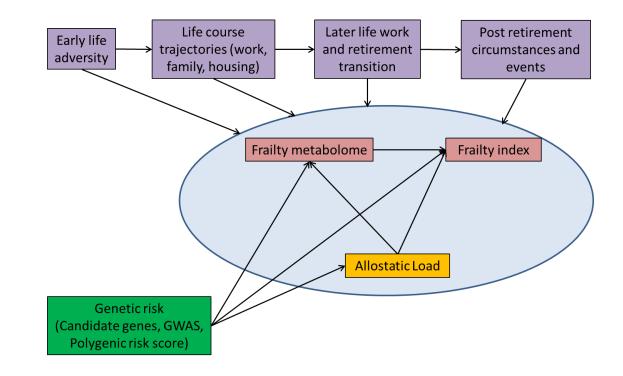




INVESTIGATING MECHANISMS SHAPING INEQUALITIES IN LATER LIFE

- Panel data to examine later life dynamics.
- Multi-disciplinary focus is crucial, cutting edge design providing detailed coverage of relevant mechanisms:
 - Evolving social and economic circumstances;
 - Psychological traits and outcomes;
 - Biological processes;
 - Access to and impact of health and social care;
 - Health, illness, disease and disability.

An interdisciplinary investigation of inequalities in risk of frailty



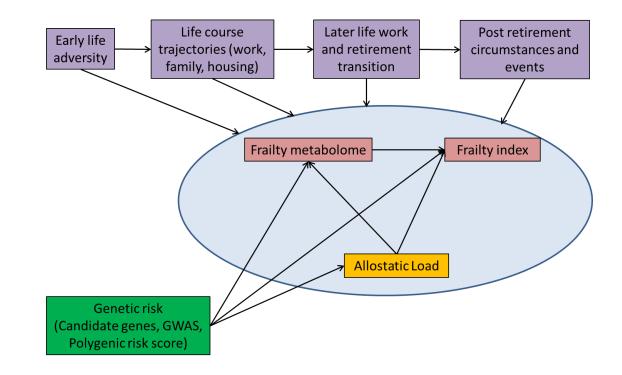




INVESTIGATING MECHANISMS SHAPING INEQUALITIES IN LATER LIFE

- Panel data to examine later life dynamics.
- Multi-disciplinary focus is crucial, cutting edge design providing detailed coverage of relevant mechanisms:
 - Evolving social and economic circumstances;
 - Psychological traits and outcomes;
 - Biological processes;
 - Access to and impact of health and social care;
 - Health, illness, disease and disability.
- Data covering a range of cohorts to examine changes in systems and processes over time and across generations.
- Detailed life history data, to examine trajectories into later life and the accumulation of advantage/disadvantage.

An interdisciplinary investigation of inequalities in risk of frailty





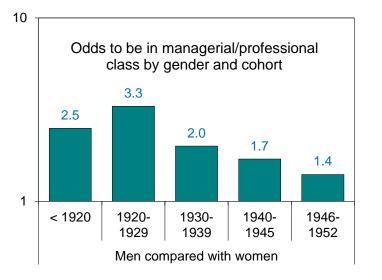


CHANGING (GENDER) INEQUALITIES?

Head Post Office 33 Claypath DURHAM ead Postmaster: S. Okey any reply please quote: 603/3962 Telephone: Durham 3252 Ext Dear Mrs. Morgan, Replying to your letter of 23rd August, addressed to the Sub Postmaster, Esh Winning S.O., I am pleased to inform you that you have been appointed Auxiliary Postwoman at Esh Winning S.O. as from 4th September, 1961. You should report to the Sub Postmaster, Esh Winni S. O. at 6.45 s.m. on Monday 4th September ready for dut I would point out that should it be possible to scruit a male candidate at some date it may be necess terminate your services. Yours truly.

I would point out that should it be possible to recruit a male candidate at some date it may be necessary to terminate your services.







"The Coronavirus pandemic is exceptionally difficult ... Now schools and nurseries have closed their doors it will be women who take on most of the unpaid care work, reducing their hours or giving up paid work, turning the clock back on gender equality ... Many women will be trapped in their homes, self-isolating with an abusive partner. It's women who are also more likely to care for older or disabled relatives and neighbours. "

The Fawcett Society

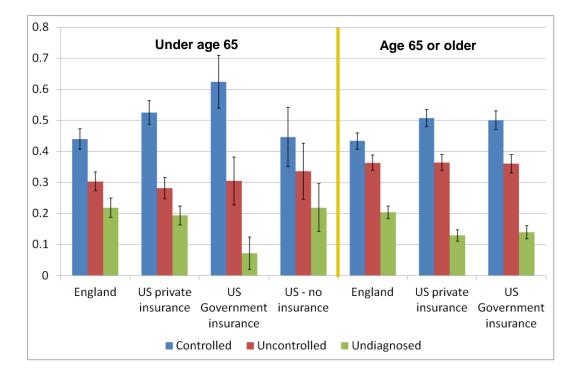




INVESTIGATING MECHANISMS SHAPING INEQUALITIES IN LATER LIFE

- Panel data to examine later life dynamics.
- Multi-disciplinary focus is crucial, cutting edge design providing detailed coverage of relevant mechanisms:
 - Evolving social and economic circumstances;
 - Psychological traits and outcomes;
 - Biological processes;
 - Access to and impact of health and social care;
 - Health, illness, disease and disability.
- Data covering a range of cohorts to examine changes in processes over time and across generations.
- Detailed life history data, to examine trajectories into later life and the accumulation of advantage/disadvantage.
- International data to explore system effects and varying economic and cultural contexts.

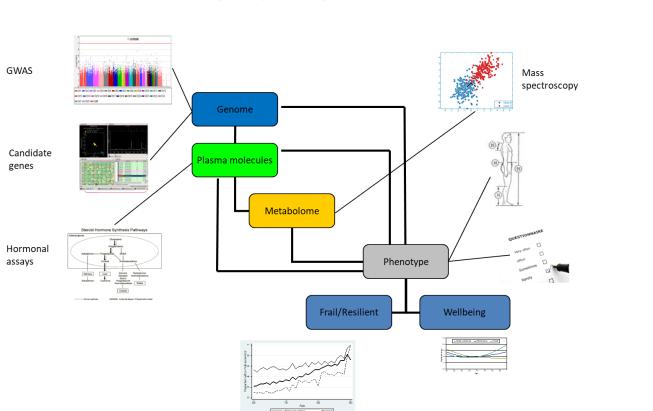
Outcomes of care for hypertension in the UK and the US





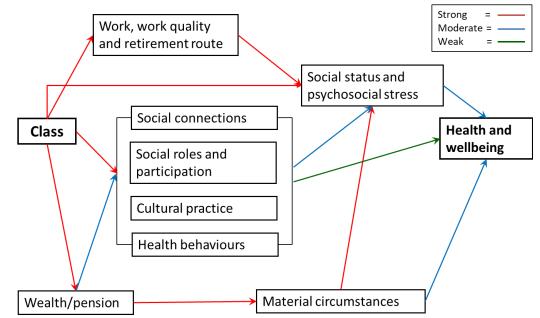


HOWEVER, A FOCUS ON INFORMING POLICY REQUIRES US TO PLACE BOTH THE DESCRIPTION OF INEQUALITY AND THE INVESTIGATION OF MECHANISMS IN CONTEXT



Investigating biological pathways

An empirical investigation of hypothesised processes shaped by class





CONCLUDING POINTS – LOOKING FORWARD

- Inequalities in later life are stark and they matter.
- An evolving research agenda, moving from description to an interdisciplinary investigation of pathways and on to an investigation of fundamental mechanisms.
- A focus on informing policy responses requires investigating how fundamental mechanisms shape trajectories, accumulation of advantage and proximal pathways.
- A starting point is to hypothesise, and test, how experiences related to class, racism and patriarchy, operating across the life course and into later life, determine the processes driving these inequalities.
- These fundamental causes shape social and economic structures and access to the resources they provide, shape interpersonal interactions, and shape the functions and processes of institutions.
- So, it is important to examine the ways in which class, racism and patriarchy operate across structural, interpersonal and institutional arenas to impact on the possession of social and economic resources.
- Structural conditions of socioeconomic disadvantage and interpersonal experiences of discrimination and violence create an increased risk of inequality across all domains.
- They also shape encounters with institutions that have policies and practices that lead to unequal outcomes – education, employment, housing, legal, politics, health and social care, etc.
- Institutional settings, then, are the sites where we see the concentration and mediation of structural forms of disadvantage and interpersonal encounters – and the potential for disruption.











Cross-national differences in health at older ages: The role of public policies

Mauricio Avendano Unisanté - University of Lausanne Harvard University

London, ELSA 20th Anniversary, 11th May 2023

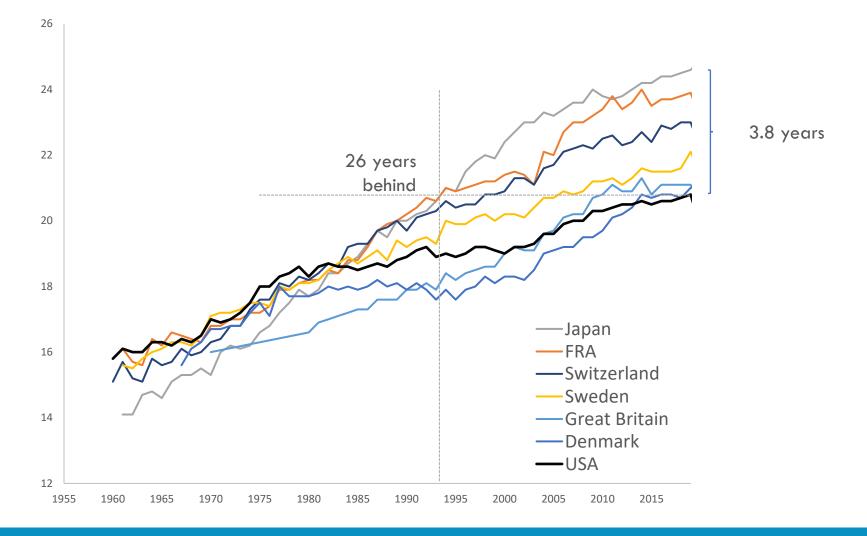








Female Life Expectancy at age 65, 1960-2020





Avendano & Kawachi, An Rev Public Health, 2014 (updated to 2020)

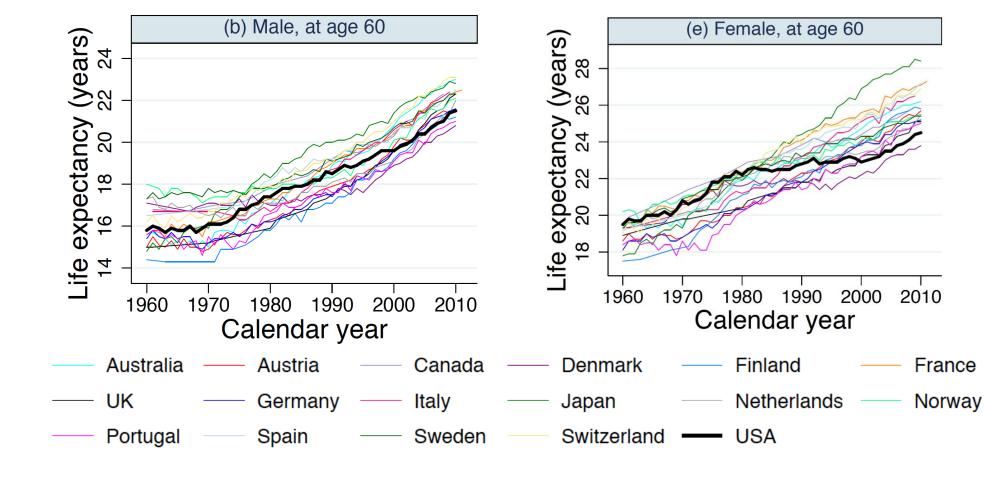


et santé publique • Lausanne



Life expectancy at 60, OECD countries, 1960-2010





Avendano & Kawachi, Ann Review of Public Health, 2014



ANNUAL REVIEWS



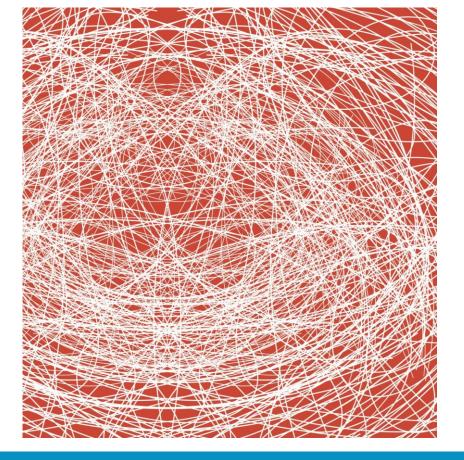


Outline

HARVARD

UNIVERSITY

- Why is this important
- The 'Discovery' of cross-national differences in health
- The explanation of differences
- The contribution of **public policy**
- Perspective on the future









Why cross-national health comparisons

• Policy relevance

- 'To improve in anything, we need inspiration.' (Lucia Kossarova)
- 'International shaming' -motivate action
- Identify impact of public action

• Scientific relevance

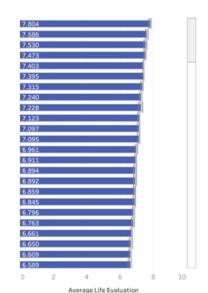
- Going beyond the individual: understand impact of policy, culture, environment, political system, social context, family structures, work
- Causal identification: Country shocks produce potentially exogenous changes in individual behaviour (e.g., smoking, caring, going to school, working, owning a house)

World Happiness Report 2023

Figure 2.1 Ranking of Happiness based on a three-year-average 2020-2022

Average Life Evaluation

Rank	Country
1	Finland
2	Denmark
3	Iceland
4	Israel
5	Netherlands
6	Sweden
7	Norway
8	Switzerland
9	Luxembourg
10	New Zealand
11	Austria
12	Australia
13	Canada
14	Ireland
15	United States
16	Germany
17	Belgium
18	Czechia
19	United Kingdom
20	Lithuania
21	France
22	Slovenia
23	Costa Rica
24	Romania



Unil I Université de Lausanne





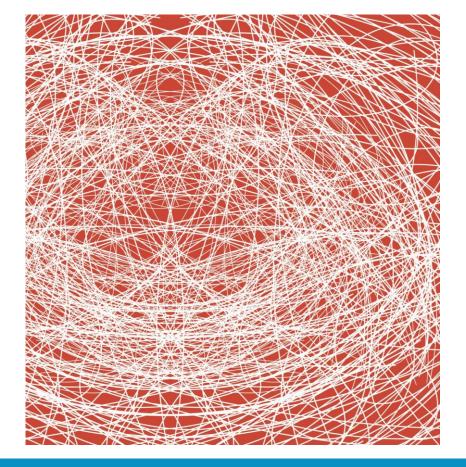


Outline

HARVARD

UNIVERSITY

- Why is this important
- The 'Discovery' of cross-national differences in health
- The explanation of differences
- The contribution of **public policy**
- Perspective on the future











Disease and Disadvantage in the United States and in England

James Banks, PhD	
Michael Marmot, MD	
Zoe Oldfield, MSc	
James P. Smith, PhD	

Context The United States spends considerably more money on health care than the United Kingdom, but whether that translates to better health outcomes is unknown.

Objective To assess the relative heath status of older individuals in England and the United States, especially how their health status varies by important indicators of so-cioeconomic position.

HE UNITED STATES HAS A CONsiderably greater expenditure on medical care (US \$5274 per capita) than in the United Kingdom (US \$2164 adjusting for purchasing power).¹ To determine whether that expenditure translates into better health outcomes for the adult US population, data on the degree of morbidity in each country beyond the childhood years are needed.

Given the strong link between socioeconomic position and health in both countries, cross-country comparisons of morbidity should examine varia-

HARVARD

UNIVERSITY

VERI

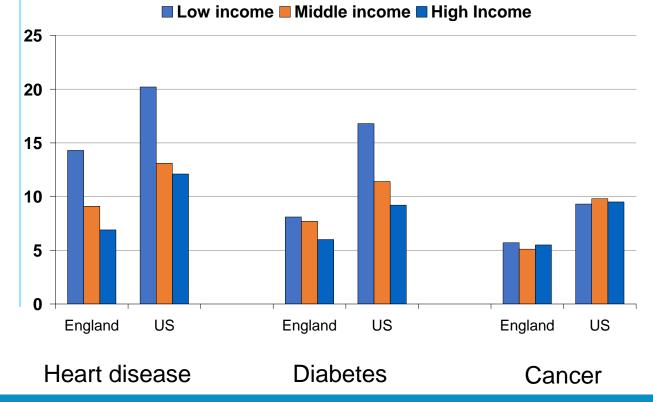
Design, Setting, and Participants We analyzed representative samples of residents aged 55 to 64 years from both countries using 2002 data from the US Health and Retirement Survey (n=4386) and the English Longitudinal Study of Aging (n=3681), which were designed to have directly comparable measures of health, income, and education. This analysis is supplemented by samples of those aged 40 to 70 years from the 1999-2002 waves of National Health and Nutrition Examination Survey (n=2097) and the 2003 wave of the Health Survey for England (n=5526). These surveys contain extensive and comparable biological disease markers on respondents, which are used to determine whether differential propensities to report illness can explain these health differences. To ensure that health differences are not solely due to health issues in the black or Latino populations in the United States, the analysis is limited to non-Hispanic whites in both countries.

Main Outcome Measure Self-reported prevalence rates of several chronic diseases related to diabetes and heart disease, adjusted for age and health behavior risk factors, were compared between the 2 countries and across education and income classes within each country.

Source: Banks, Marmot, Oldfield and Smith; JAMA 2006



Differences in self-rated health between England and the US, 55-64 year olds



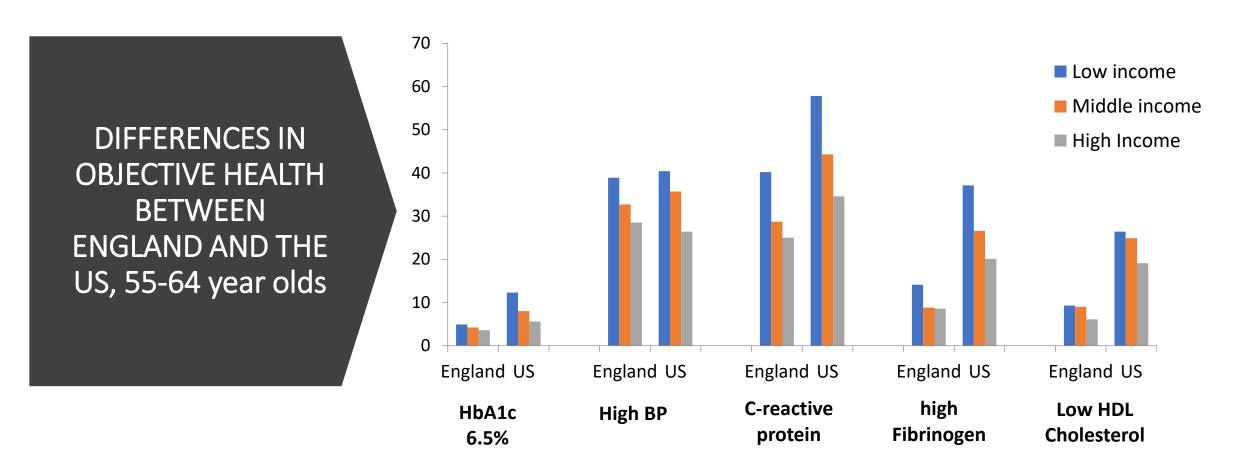


Centre universitaire de médecine généra et santé publique · Lausanne

unisanté







Source: Banks, Marmot, Oldfield and Smith; JAMA 2006



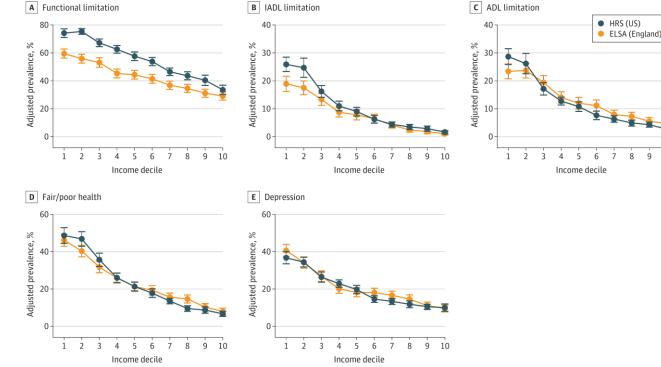


re universitaire de médecine général nté publique • Lausanne

unisantė



Adjusted Prevalence of Self-assessed Health Outcomes at Ages 55 to 64 Years for 2008-2016 by Country-Specific **Income Decile**



Source: Choi et al, JAMA Int Med, 2020





et santé publique · Lausann

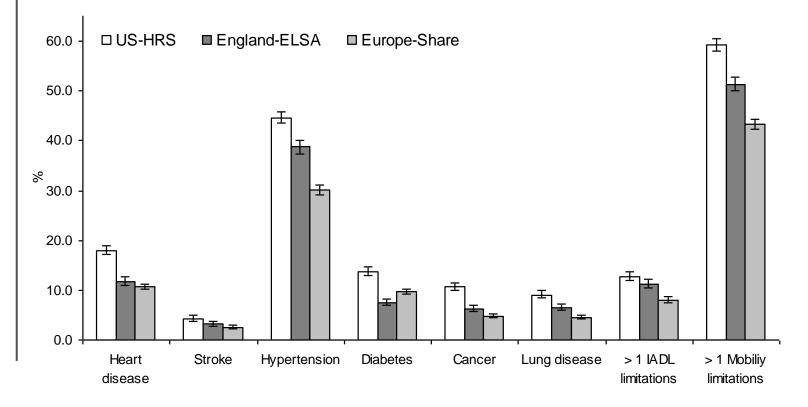






Health Disadvantage in US Adults Aged 50 to 74 Years: A Comparison of the Health of Rich and Poor Americans With That of Europeans

Mauricio Avendano, PhD, M. Maria Glymour, ScD, James Banks, PhD, and Johan P. Mackenbach, PhD



Source: Avendano et a Am J Public Health 2009

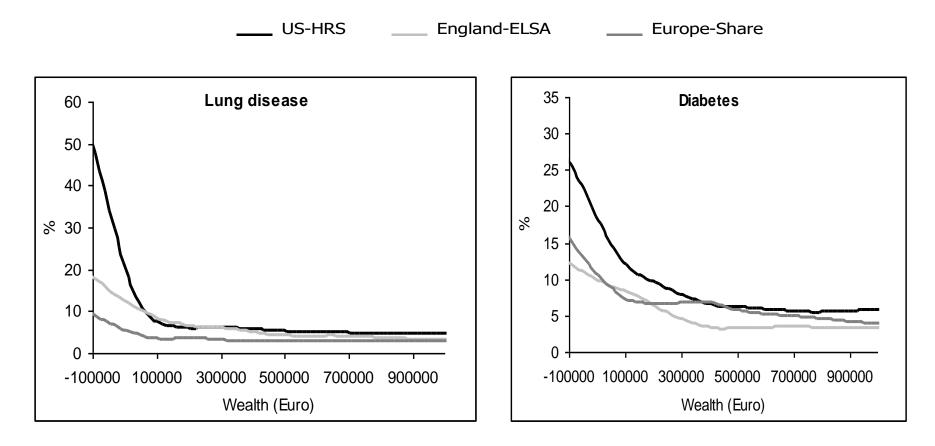
UNIL | Université de Lausanne UNIL | Université de Lausanne





LC H E LAUSANNE CENTER FOR HEALTH ECONOMICS BEHAVIOR, AND POLICY

Health and Wealth in the US and Europe, aged 50-74





American Journal of PUBLIC HEALTH

Source: Avendano et a Am J Public Health 2009

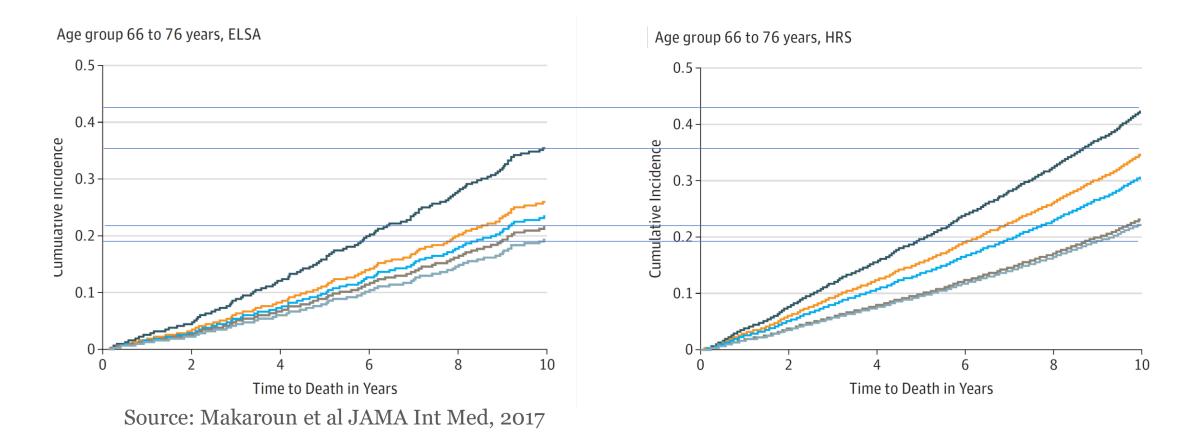








Cumulative incidence of death by wealth quintile, 66-76, USA (HRS) and England (ELSA)









ScienceDirect

Contents lists available at **sciencedirect.com** Journal homepage: **www.elsevier.com/locate/jval**

Economic Evaluation

Where Are Populations Aging Better? A Global Comparison of Healthy Aging Across Organization for Economic Cooperation and Development Countries

Thomas Rapp, PhD, Jérôme Ronchetti, PhD, Jonathan Sicsic, PhD



- PA highest (aging in poorer health): Italy, Israel, and the United States
- Lower PA than CA (healthy aging): Switzerland, The Netherlands, Greece, Sweden, and Denmark

Intensity gap (months)

-32

HRS ELSA



Discrepancy between estimated

age (CA)

physiological age (PA) and chronological

Source: Rapp, Ronchetti & Sicsic, Value in Health, 2022



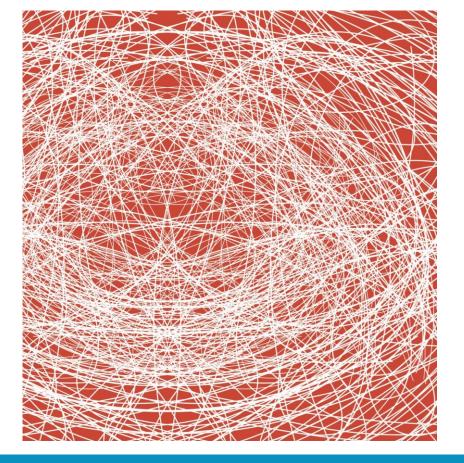
unisanté Centre universitaire de médecine générale et santé publique - Lausanne





Outline

- Why is this important
- The 'Discovery' of cross-national differences in health
- The explanation of differences
- The contribution of **public policy**
- Perspective on the future











EXPLAINING THE US HEALTH AND MORTALITY DISADVANTAGE

International Differences in Mortality at Older Ages

DIMENSIONS AND SOURCES

Smoking histories (Preston et al; Pampel)

Obesity (Alley et al)

Physical activity (Steptoe & Wikman)

Social integration and social interactions (Banks et al)

he Health System (Preston & Ho

Hormone therapy (Goldman)

Socioeconomic Inequality (Avendano et al)

Geographical inequalities (Wilmoth et al)

'Having the **highest level of cigarette consumption** per capita in the developed world over a 40-year period (up to the mid-1980s) has left a very visible and continuing imprint on U.S. mortality'









The US Health disadvantage across the life-course

U.S. HEALTH





ATIONAL RESEARCH COUNCL AND INSTITUTE OF MEDICINE OF THE MILTONE ACCOUNT

Public Health and Medical care systems

Behaviour: Tobacco, diet, physical activity, alcohol & drug use, sexual practices, injuries

Social factors

Physical and social environments

Policies and Social values

'Given the pervasive nature of the low U.S. rankings..... Might **certain aspects of life in modern America** be part of the explanation for the U.S. health disadvantage? '

'There are no definitive studies on this subject, but the public health literature certainly documents **the health benefits of strengthening systems for health and social services, education, and employment; promoting healthy life-styles; and designing healthier environments'**





re universitaire de médecine générale nté publique · Lausanne



Why do Americans have Shorter Life Expectancy and Worse Health Than Do People in Other High-Income Countries?

Mauricio Avendano^{1,2} and Ichiro Kawachi²



Review in Advance first posted online on January 9, 2014. (Changes may still occur before final publication online and in print.)

Annu. Rev. Public Health 2014. 35:23.1-23.19





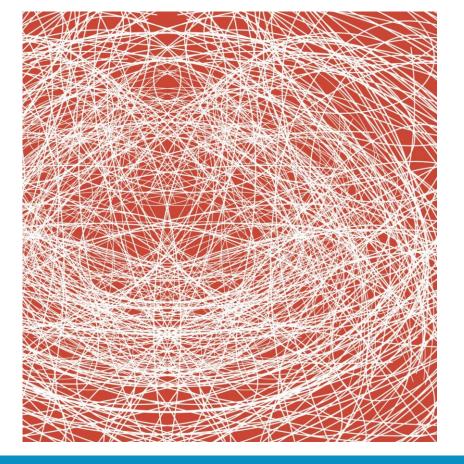


Outline

HARVARD

UNIVERSITY

- Why is this important
- The 'Discovery' of cross-national differences in health
- The explanation of differences
- The contribution of **public policy**
- Perspective on the future









American Journal of Preventive Medicine

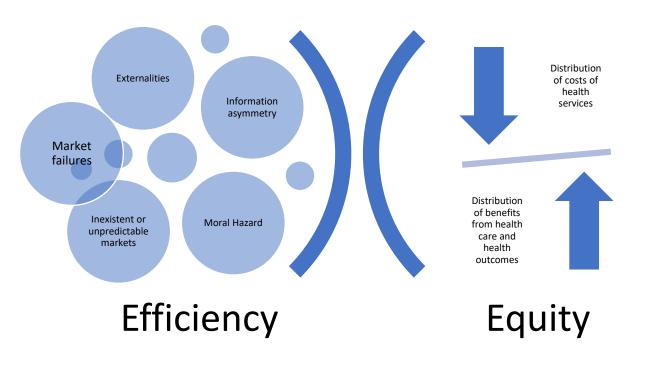
RESEARCH ARTICLE

Social Policy Expenditures and Life Expectancy in High-Income Countries

Megan M. Reynolds, PhD,¹ Mauricio Avendano, PhD^{2,3} A) B) C) 8-8-8-8 8 88 78 78 28 76 76 28 74 4 4 4.5 5 5.5 6 6 Mean Education 1.6 1.8 2 2.2 2.4 2.6 Mean Family 6.5 7 1.2 1.4 1.6 1.8 Mean Unemployment 2 D) E) F) 8-8-82 8 8 8 78 78 78 76 76 76 47 4 2.4 2.6 2.8 Mean Incapacity 2.2 з 3.2 5 .6 .7 Mean ALMP 6 7 8 Mean Old Age 8 9 .5 .8 .9



Estimating the contribution of public policies



- Policies aim to maximise some dimension of wellbeing, but not necessarily health
- Two questions need to be addressed:
 - **Q1:** How do public polices influence health?
 - Q2: Are differences in health caused by policy sufficiently large to explain cross-national differences in health?





re universitaire de médecine générale nté publique · Lausanne



Public policies that may impact population health

Early childhood education	Education policy, e.g., compulsory schooling laws	Labour market policies, e.g., retirement and pension policy, unemployment benefits
Family policy, e.g., maternity leave policy, work-flexibility policies	Housing policies, e.g., relocation programmes	Anti-poverty policy, e.g., cash transfers, welfare benefits
Built environmental policies, e.g., transportation	Health policies, e.g., health insurance, regulation of drugs, public health	Long-term care policy

Public transport policy: The free Bus Pass

1371



English Longitudinal Study of Ageing, 2002 – 2014





ti santé publique : Lavianire



Transport use and cognitive function ELSA scores in older age, ELSA

	Probability of transport use β (95% CI)		IV 2nd Stage β (95% CI)
Eligible for free	0.074 (0.060,	Total Cognitive Function	0.346 (0.017,0.674)*
bus travel 0.089)*** 7% increase in transport use if eligible to free bus pass		Memory	0.546 (0.111,0.982)*
		Executive Function	0.323 (-0.153,0.800)
		Processing Speed	0.332 (-0.234,0.898)

*p<0.05 **p<0.01 ***p<0.001

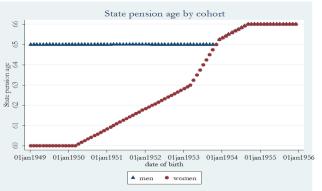
Reinhard et al, Am J Epi, 2019

JOURNAL OF POLICY ANALYSIS AND MANAGEMENT

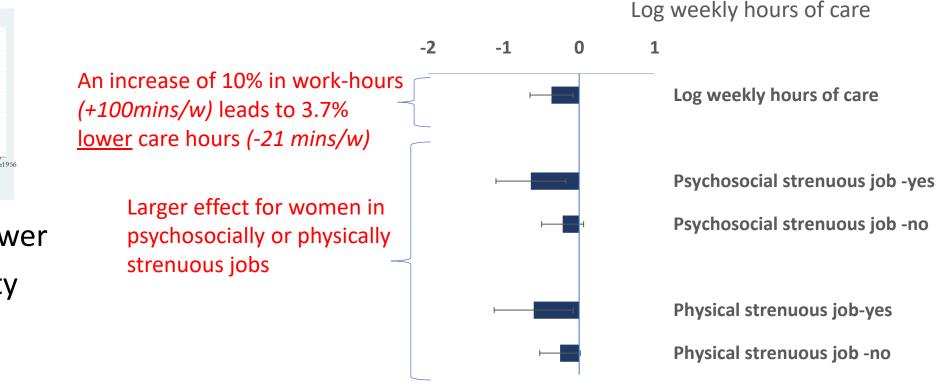
ELSA

Should I Care or Should I Work? The Impact of work on Informal Care

Ludovico Carrino^{a,b} Vahé Nafilyan^{c,d}, Mauricio Avendano^{e,f}



Prolonging work → lower caregiving: opportunity costs of time is higher



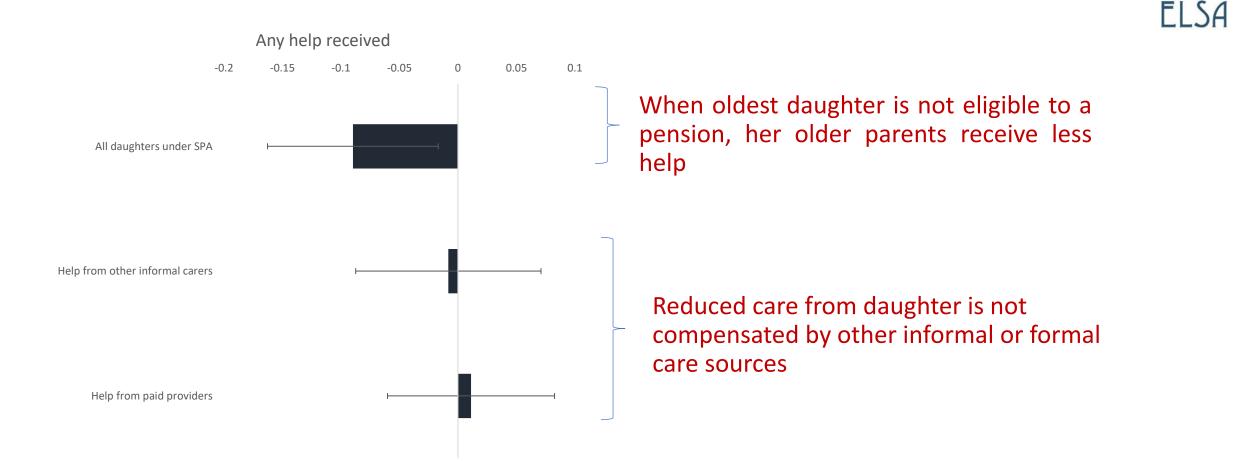




UNISANCE Centre universitaire de médecine générale



The impact of reduced daughter's informal care on older parents' receipt of care





Carrino, Nafilyan & Avendano, JPAM, 2022



ntre universitaire de médecine général santé publique • Lausanne



Campaign to Fod Oneliness

CONNECTIONS IN OLDER AG

To watch the full video

Click here

Together, we can end loneliness

1.2 million people in the UK are chronically lonely.

Over half a million older people in the UK go up to a week without seeing anyone.

But we can all take action.

Sign up today and help us end loneliness in the UK.

First Name

Last Name

I want to end loneliness

Email

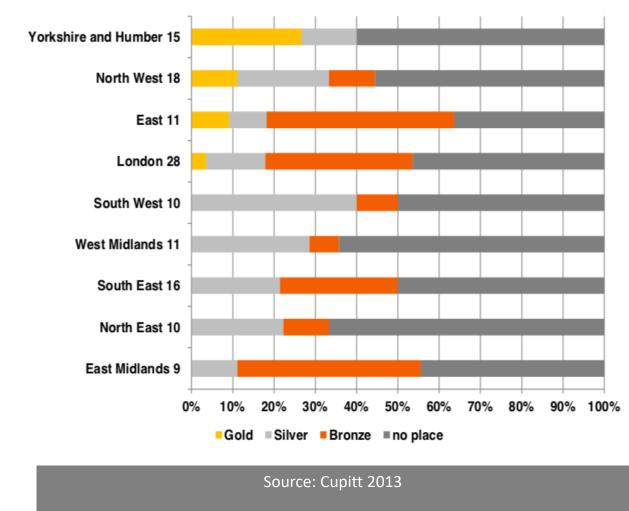
*By clicking 'I want to end loneliness', you are signing up for The Campaign To End Loneliness mailing list. We will update you on the campaign's progress and let you know how you can make a difference. You can unsubscribe at any time.



Campaign to End Loneliness

- Main differences of strategies
- Gold: measurable actions and targes on tackling issues of loneliness
- Silver: stated commitment to learning about the issue of loneliness in local areas and improving social relationships
- Bronze: recognition of loneliness as an issue and commitment to improving social relationships

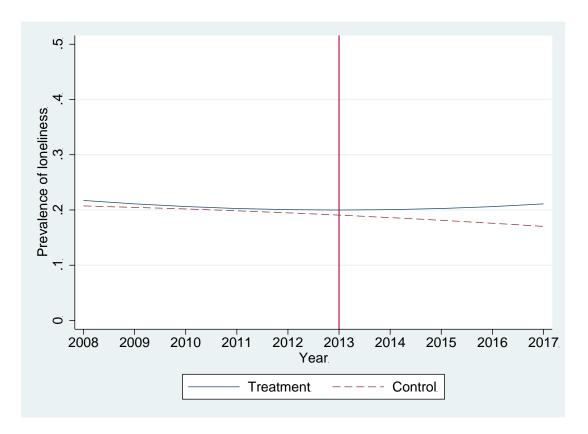
Chart 2: Within-region distribution of ranked strategies (Total number of HWBs in each region shown after region name)



Li, Carrino, Reinhard, Avendano, in preparation



Impact of End Loneliness campaign ELSA on feelings of loneliness



	Loneliness
Panel A: by education	(1)
Education (=A-level or above)	-0.113
	(0.058)
Time* Treatment	0.134
	(0.103)
Time* Treatment*Education	-0.379***
	(0.104)

reduced levels of loneliness for higher educated (\geq A-level) older adults by 0.4 unit



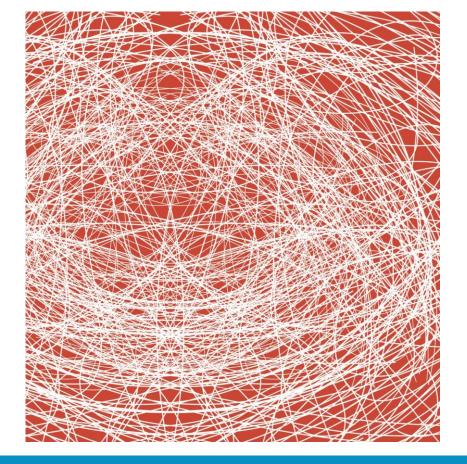
Li, Carrino, Reinhard, Avendano, in preparation





Outline

- Why is this important
- The 'Discovery' of cross-national differences in health
- The explanation of differences
- The contribution of **public policy**
- Perspective on the future







HARVARD UNIVERSITY





The future

- Link to more policies, consider time lag of policy effect operating across childhood, adult life and older age
- Examine the synergic effect of policies

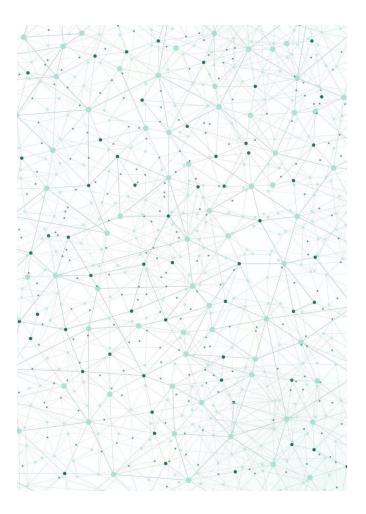
 and the contribution of multiple
 policies (or constellations of policies),
 rather than single policies
- Link specific outcomes to specific policies or exposures –e.g., link cancer survival to specific cancer prevention policies











Conclusions

- ELSA and HRS-sister studies have taught us that cross-national differences in health a) are large and real; b) apply too all SES groups, but are often larger for the bottom of the SES distribution
- There is no simple explanation: a) smoking likely important for historical trends, but behavioural differences not full explanation;
 b) health care unlikely to be a explanation for all differences
- Public policies likely important, but a) establishing causal impacts challenging, b) only local average treatment effects obtained; c) challenging to harmonise all policies across countries
- ELSA and HRS-sister surveys are unique resource to understand how public policies shape cross-national health differences by influencing the environment in which people age





Cross-Country Comparisons

2023 ELSA 20th Anniversary Conference

Jinkook Lee, University of Southern California

Aging changes, universal or heterogeneous?

Aging changes can be attributed to

- an inherent process, referred to as the aging process;
- genetic defects;
- disease processes; and
- the environment.

Environment International 156 (2021) 106722 Contents lists available at ScienceDirect



Environment International

journal homepage: www.elsevier.com/locate/envint



Opportunities to study what is universal

Household use of polluting cooking fuels and late-life cognitive function: A harmonized analysis of India, Mexico, and China

Joseph L. Saenz ", ", Sara D. Adar $^{\rm b},$ Yuan S. Zhang $^{\rm c},$ Jenny Wilkens $^{\rm d},$ Aparajita Chattopadhyay ", Jinkook Lee $^{\rm d,f},$ Rebeca Wong $^{\rm g}$

Fig. 1. Adjusted mean differences in cognitive functioning

Parameter Model: Country	Estimate	s for Poll	luting Co	oking Fu	el Use by		ntry and Model [Estimate & 95% Cl]_
Model 1: India Model 1: Mexico Model 1: China Model 2: India Model 2: Mexico Model 2: China Model 3: India Model 3: Mexico Model 3: China	⊢₽		۰ بـــ	- # -1 - # -1 -		T	-0.36 [-0.38, -0.34] -0.48 [-0.54, -0.42] -0.22 [-0.26, -0.19] -0.17 [-0.19, -0.15] -0.22 [-0.28, -0.17] -0.11 [-0.14, -0.07] -0.12 [-0.13, -0.10] -0.11 [-0.17, -0.05] -0.05 [-0.08, -0.02]
_							
-0.6	-0.5	-0.4	-0.3	-0.2	-0.1	0	
	arameter E	Estimate	0.0	•·-	•••	/al	

Opportunity to study diverging trends

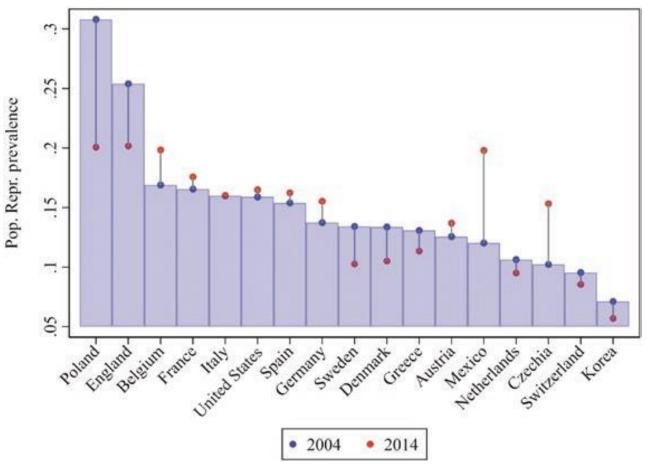
Living Longer, With or Without Disability? A Global and Longitudinal Perspective

Jinkook Lee, PhD, Samuel Lau, BA, Erik Meijer, PhD, Peifeng Hu, MD, PhD

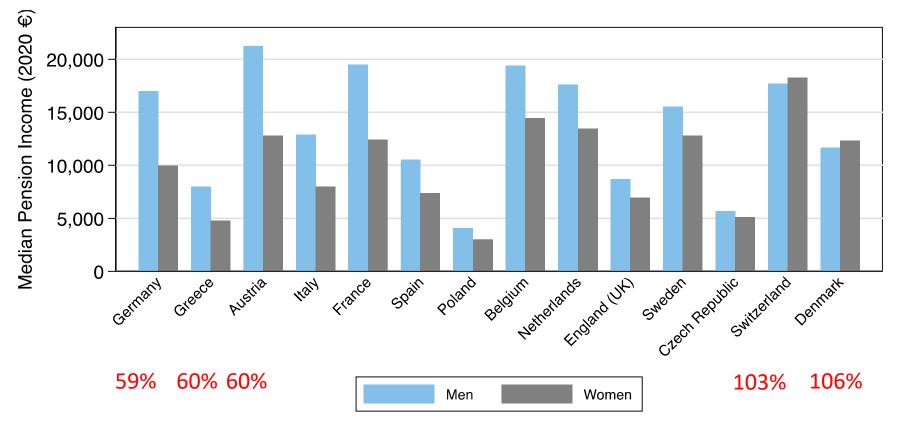
The Journals of Gerontology: Series A, Volume 75, Issue 1, January 2020, Pages 162–

167, https://doi.org/10.1093/gerona/glz007

Population representative disability prevalence rates



Opportunity to study disparity



Notes: Estimates are conditional on observing individuals at age 70 or older to avoid censoring on pension income level. Income depicted in 2020 euros. Values are computed by first taking the median of non-zero, inflation-adjusted annual after-tax pension income reported by individuals across interviews and then taking the median by sex and country.

Germany Own Old-Age Benefits Plan details 1992-2021

Gesetzliche Rentenversicherung (GRV) is the German compulsorary old age public pension system that provides a defined benefit to workers based on their contribution history. Contributions are converted in points in the year they are paid and those points are converted to an annual benefit based on a pension point value that is updated annually. Since 1992, the main design of the pension system has remained largely the same, but reforms have led to a gradual increase in benefit eligibility ages and the introduction of incentives to delay starting benefits.

Key Dates First law: 1889 Major changes since 1992: 1999, 2001, 2004, 2007

What explains sexbased differences?

- Work history differences
 - Labor force participation over lifecycle
 - Earnings over lifecycle
- Policy differences
 - Retirement eligibility policies
 - Progressivity of benefits

Contents

	5
	5
	5
	5
Benefits	6
Chapter 2: Policy enacted 1996-2000	8
	8
Contributions	8
Eligibility	8
Benefits	0
Chapter 3: Policy enacted 2001-2006	3
Overview	3
Contributions	3
Eligibility	4
Benefits 1	5
Chapter 4: Policy enacted 2007-2021	8
Overview	8
Contributions	8
Eligibility	8
Benefits	D
Tables and Formulas 2	3
Table 1: Contribution Rates by Year 2	3
Formula 1: Computation of Pension Points	3
Formula 2: GRV Pension Benefit at SRA	4
Table 2: Pension contribution limit and average nation-wide earnings 2	4
Table 3: States in East and West Germany	5
Table 4: Pension Point Value by Year 2	5
Formula 3: GRV Pension Benefit If Started After SRA (Delayed Claiming) 2	6
Table 5: Statutory Retirement Age (SRA) by Birth Year for Regular Old-Age Pension (Eligibility Track 1) 2	6
Formula 4: Reduced Pension Benefit if Working Before SRA (Earnings Test), 1992-1999	7
Table 6: Additional Earnings Thresholds by Year 2	8

*If you have questions or suggestions, please contact policy@g2aging.org.

¹Detailed information and definitions are provided in tables, formulas and a glossary at the end of this document. To facilite switching back and forth, this document is designed with hyperlinks. Most PDF readers have shortcuts that permit a reader to return to the previous location after selecting a hyperlink. In Adobe Acrobat on a PC: "Att" + ---"; In Adobe Acrobat on a MAC: "command" + "--"; In Previous I acromation" + "[[]."

Thank You! Happy 20th Anniversary!



The experiences of older people during the COVID-19 pandemic

Dr Giorgio Di Gessa

g.di-gessa@ucl.ac.uk

elsa-project.ac.uk

Outline

ELSA response to the **COVID-19** pandemic

- ELSA COVID-19 substudy
- National core study (NCS)

Key findings

Outline

 ELSA response to the COVID-19 pandemic
 ELSA COVID-19 substudy

National core study (NCS)

Key findings

Background



23 March 2020 – PM announces lockdown in UK

- Closure of educational institutions, community facilities, and non-essential shops and services
- Public, and particularly older people, to "stay at home" and limit physical interactions with others
- 3.7m clinically vulnerable patients (74% aged 50+) were required to "shield"



ELSA COVID-19 substudy

Developed to understand the experience of the pandemic among older people and whether and how this affected older people's health, finances, and social lives.

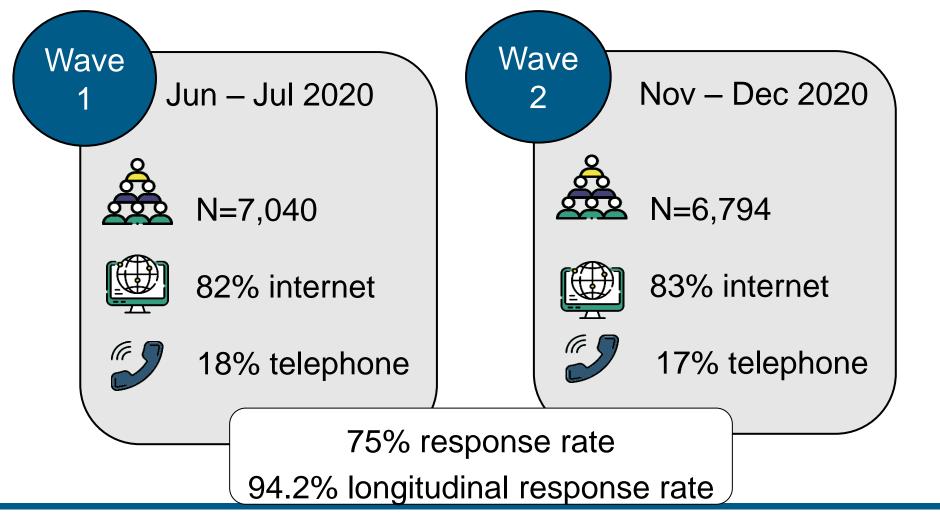




Funded by the Economic and Social Research Council via the UK Research and Innovation COVID-19 Rapid Response call

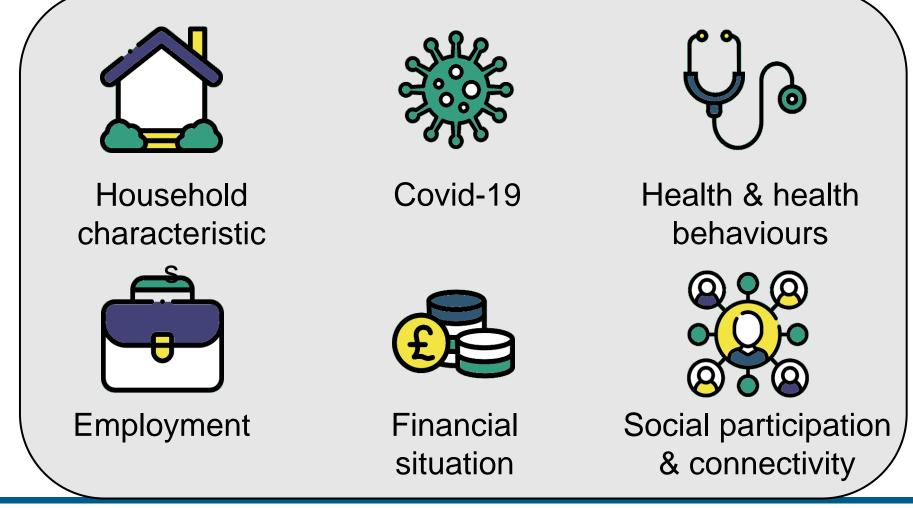


Data collection and participants



elsa

Measures





National Core Studies (NCS)





The National Core Studies (NCS) were established by Sir Vallance, UK Chief Scientific Adviser, in Oct 20 as part of the UK's response to the pandemic.

One of the six NCS created - **COVID-19 Longitudinal Health and Wellbeing NCS** focussed on understanding the health, social, and economic impacts of the COVID-19 pandemic by uniting established population cohorts and anonymised electronic health records to inform policy.

Longitudinal Studies



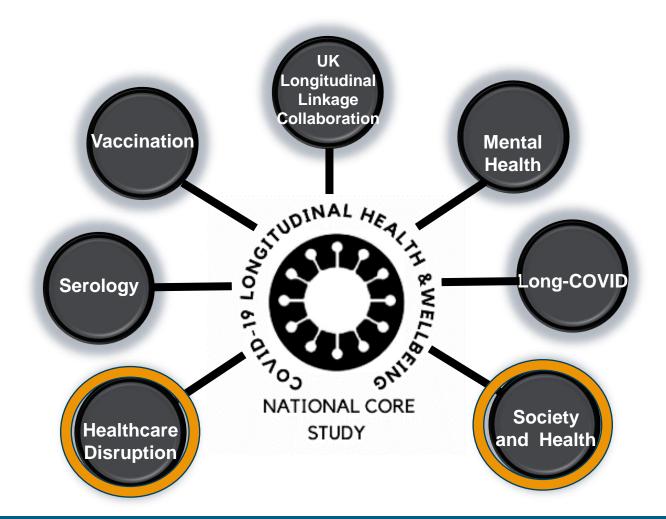


Collaborative Team



Research Areas

elsa



The NIHR-UKRI funded CONVALESCENCE

study to help define long-COVID, its determinants, and health, social and economic consequences to improve diagnosis, management, and support.

COVID-19 National Core Study



Coronovirus post-acute longterm effects: constructing an evidence base

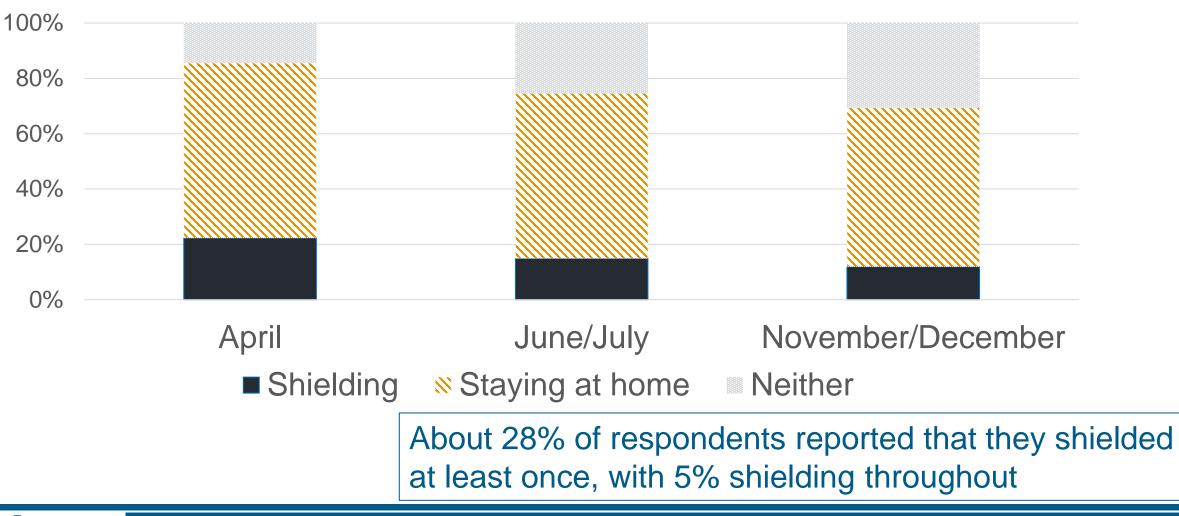
Outline

ELSA response to the **COVID-19** pandemic

- ELSA COVID-19 substudy
- National core study (NCS)

Key findings

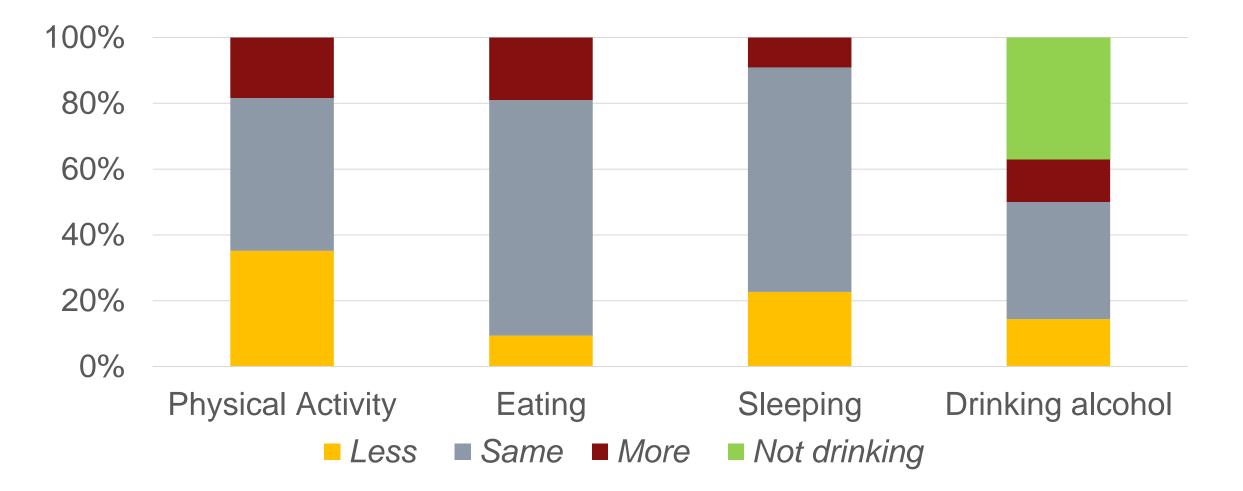
Shielding in 2020



elsa

Di Gessa G, Price D. The impact of shielding during the COVID-19 pandemic on mental health: evidence from the English Longitudinal Study of Ageing. *Br J Psychiatry*. 2022. DOI: 10.1192/bjp.2022.44. PMID: 35369895.

Changes in health behaviours - June/July 2020

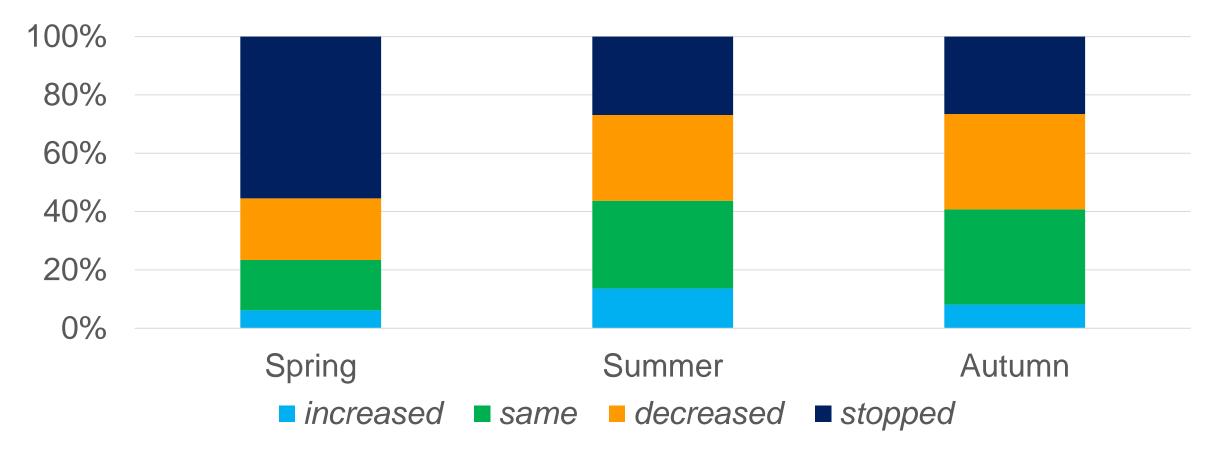


elsa

Di Gessa, G., & Zaninotto, P. (2023). Health Behaviors and Mental Health during the COVID-19 Pandemic: Evidence from the English Longitudinal Study of Aging. *Journal of Applied Gerontology*, *2023*. DOI: 10.1177/07334648231159373

Changes in grandchild care provision in 2020

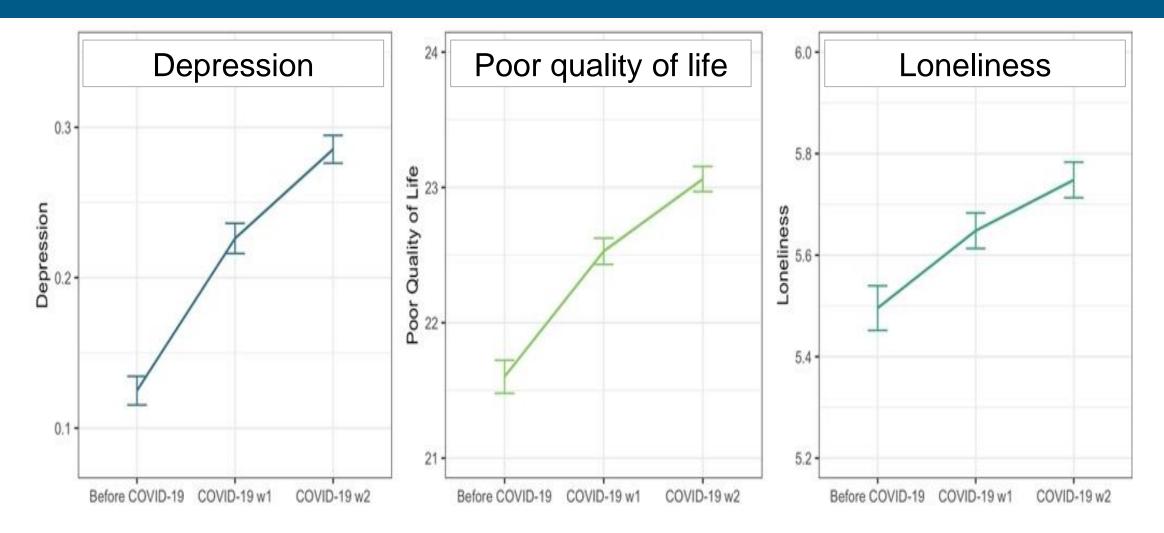
In Feb 2020, ~50% of grandparents provided grandchild care



elsa

Di Gessa G, Bordone V, Arpino B. Changes in Grandparental Childcare During the Pandemic and Mental Health: Evidence From England. *J Gerontol B Psychol Sci Soc Sci.* 2023. DOI: 10.1093/geronb/gbac104

Trends in mental health and wellbeing



elsa

Zaninotto P, Iob E, Demakakos P, Steptoe A. Immediate and Longer-Term Changes in the Mental Health and Well-being of Older Adults in England During the COVID-19 Pandemic. *JAMA Psychiatry*. 2022 DOI: 10.1001/jamapsychiatry.2021.3749

Differential impact

Poorer mental health and well-being

Particularly among those with disabilities; multimorbidities; shielding; who experienced changes in health behaviours, provision of informal care, and paid work

Differences by socioeconomic groups, gender, and living arrangements (women, non-partnered, and low socioeconomic groups experienced greatest deterioration over time)



NCS Overall strategy

Data: Up to 12 of the UK's pop-based longitudinal studies (n= 68,912)
 Method: Statistical analyses within studies then combined with RE meta-analysis. Stratified by age groups and gender

Over 20 publications (and counting)...

- 1. Inequalities in healthcare disruptions
- 2. Coronavirus Job Retention Scheme and mental & social wellbeing



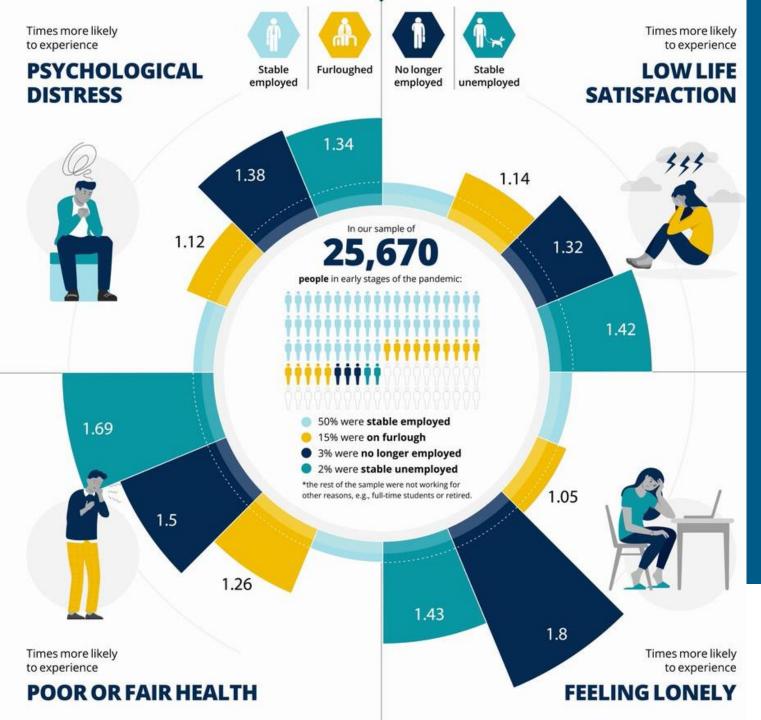
Inequalities in healthcare disruptions

Sex (ref. male) 1.27 (1.15, 1.40) Female Social class (ref. Managerial/Admin/Professional) 1.07 (0.99, 1.15) Intermediate Manual/routine 1.17 (1.08, 1.27) Other/Missing 1.51 (1.12, 2.04) Ethnicity (ref. White) Ethnic minority (excluding White ethnic minority) 1.19 (1.05, 1.35) Age (ref. 45-54y) 16-24y 0.76 (0.40, 1.48) 25-34 0.86 (0.70, 1.04) 35-44y 0.92 (0.74, 1.15) 1.18 (0.99, 1.40) 55-64y 1.39 (1.13, 1.72) 65-74y 75+y 1.49 (0.93, 2.39) 2.5 .5

elsa

Maddock J, Parsons S, Di Gessa G, *et al* Inequalities in healthcare disruptions during the COVID-19 pandemic: evidence from 12 UK population-based longitudinal studies. *BMJ Open* 2022;**12:**e064981. DOI: 10.1136/bmjopen-2022-064981

OR (95% CI)



Furlough and mental and social wellbeing

Furlough was associated with better mental health outcomes compared to becoming unemployed ➤ Not as good as employment

Wels J, et al. Mental and social wellbeing and the UK coronavirus job retention scheme: Evidence from nine longitudinal studies. Soc Sci Med. 2022 DOI: 10.1016/j.socscimed.2022



Thank you for your attention



@COVID19_LHW
@ELSA_Study
@di_gessa







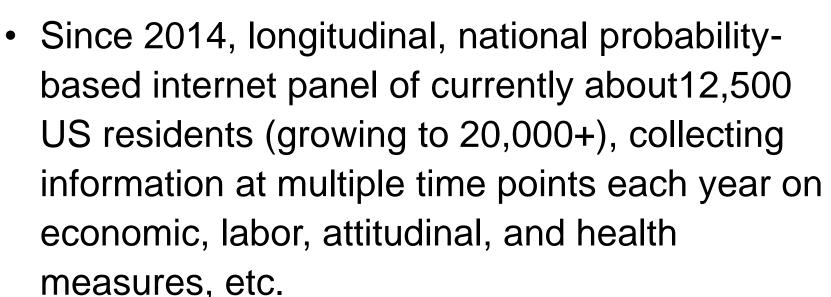
COVID Tracking in the Understanding America Study

Arie Kapteyn

We gratefully acknowledge financial support from the Bill & Melinda Gates Foundation, the National Science Foundation, and the National Institute on Aging (3U01AG054580-04S3)



Understanding America Study



 Tracking pandemic effects started March 10, 2020



Every day ~450 respondents answered our questions

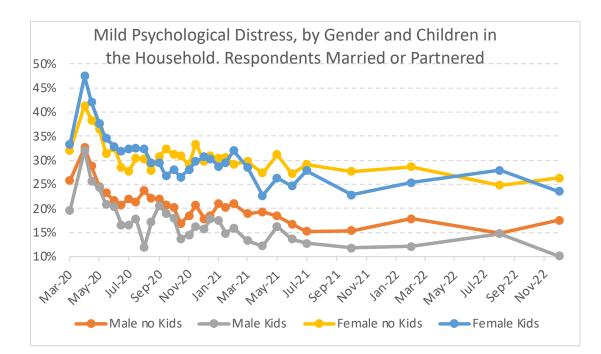
6,000-6,500 over two weeks (Frequency halved since February 2021 summer 2021)



Every day ~450 respondents answered our questions

6,000-6,500 over two weeks (Frequency halved since February 2021 summer 2021)

Almost three thousand new graphs every day <u>https://covid19pulse.us</u> <u>c.edu/</u>

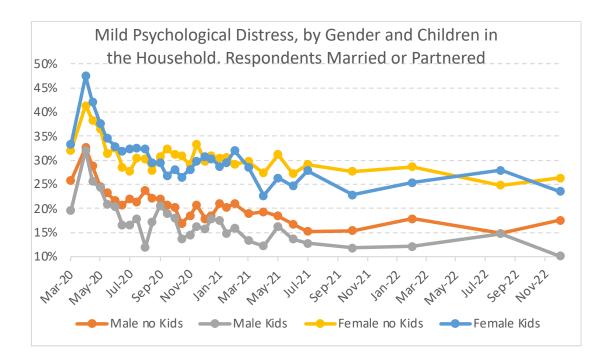




Every day ~450 respondents answered our questions

6,000-6,500 over two weeks (Frequency halved since February 2021 summer 2021)

Almost three thousand new graphs every day https://covid19pulse.us c.edu/



High frequency tracking ended at the end of June 2021; since then one survey every four months (so far until November/December 2022)



Data Widely Available in Real Time



- Full wave data files released for public use every two weeks, including a harmonized longitudinal file and codebooks: <u>https://uasdata.usc.edu/page/Covid-19+Home</u>
 - Thirty-three waves of national data and fifty-seven waves of LA County data available.
 - 208,858 completed surveys from 10,716 different respondents
 - Well over 500 research groups worldwide, comprising some 1,000 researchers are using UAS COVID19-related data
 - About 150 peer reviewed publications that we know of, so far.
 - We have added contextual data that can be downloaded with the longitudinal data



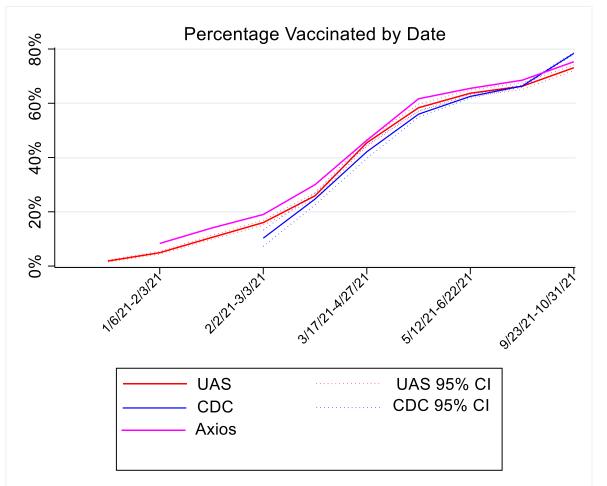


Accuracy of Population Estimates



and Social Research

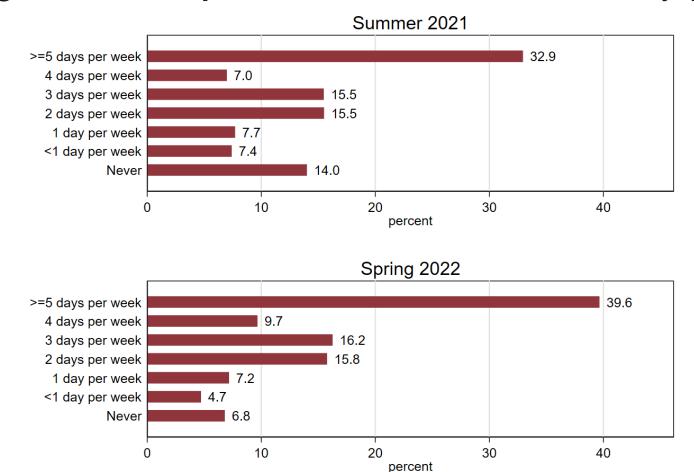
Comparing CDC, Knowledge Panel (Axios/Ipsos) and UAS





Preferences for Working from Home

(among those with jobs where that is technically possible)



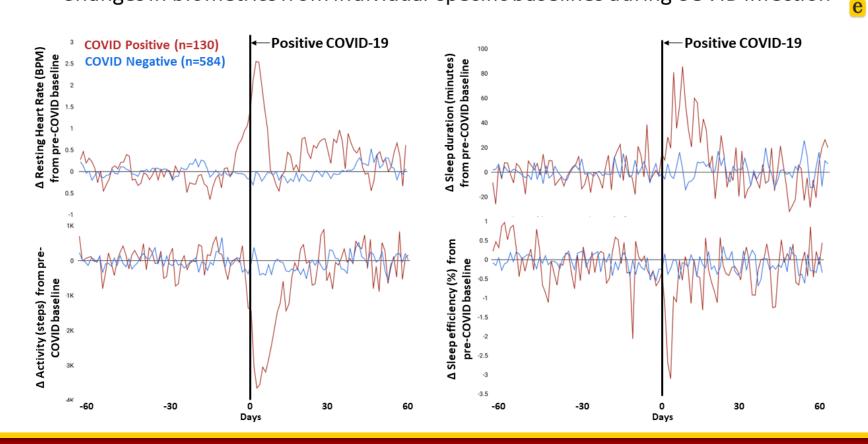


Accuracy of Self-Reported Infections



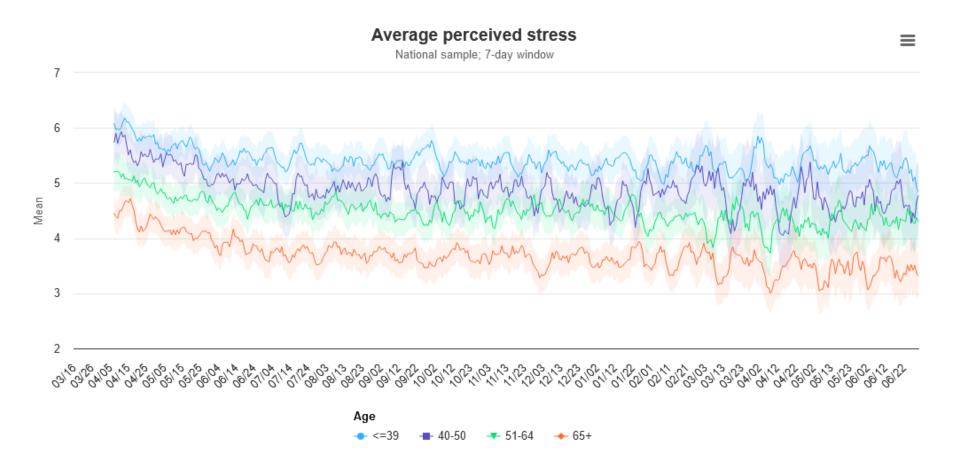
Schaeffer

Changes in biometrics from individual-specific baselines during COVID infection 😤









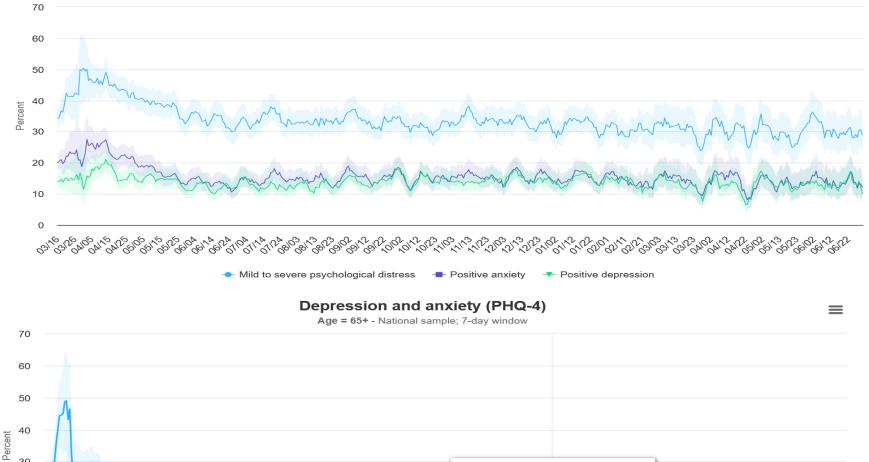


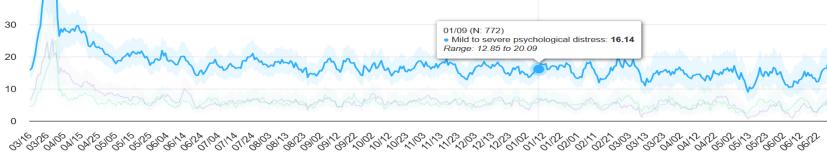
Depression and Anxiety by Age



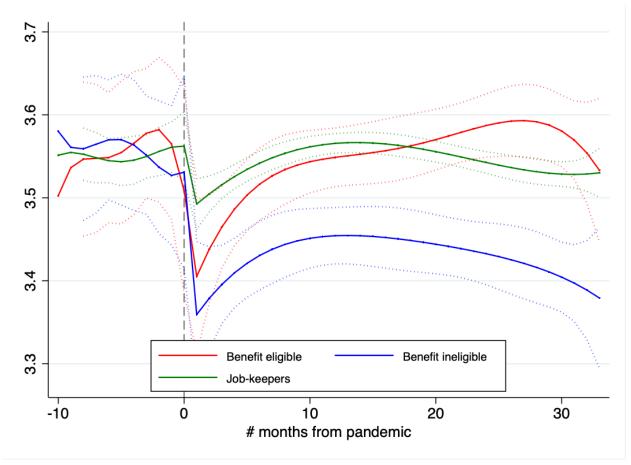
Depression and anxiety (PHQ-4)

Age = <=39 - National sample; 7-day window





Extended Benefits for Job Losers made all the difference (50+, 4th Degree Polynomials)





Miscellaneous Results



- Trump voters less likely
 - to get vaccinated
 - to exhibit protective behavior
- Trump voters estimate lower risks of infection and death
- Striking correspondence between self-reported long covid and associated symptoms





Thank you!



University of Southern California



The contribution of ELSA to the study of cognitive ageing

Andrew Steptoe

elsa-project.ac.uk

ELSA cognitive measures

	Wave 1 2002/03	Wave 2 2004/05	Wave 3 2006/07		Wave 5 2010/11	Wave 6 2012/13	Wave 7 2024/15	Wave 8 2016/17	Wave 9 2018/19	Wave 10 2021/23
Self-rated memory	~	~	~	v						
Orientation in time	~	~	~	~	~					
Immediate and delayed recall	~	~	~	~	~					
Prospective memory	~	~	~	~	~					
Word-finding (verbal fluency)	~	~	~	~	~					
Fluid intelligence (number series)										
Letter cancellation	~	~	~	~	~					
Numerical ability	~			~						
Literacy		~			~					

Early findings on cognition

- Cognitive function relates to investments and understanding of pensions (Banks & Oldfield, 2007)
- Association between cognitive function and alcohol consumption (Lang et al, 2007)
- Cognitive function and psychological wellbeing (Llewellyn et al, 2008)



Emerging focus on Alzheimer's disease and related dementias

2011 Substantial increase in US Federal funding for AD/ADRD research

2012 UK Government launched dementia challenge

2014 Establishment of Dementias Platform UK

2015 Establishment of UK Dementia Research Institute



ELSA cognitive measures

	Wave 1 2002/03	Wave 2 2004/05	Wave 3 2006/07	Wave 4 2008/09	Wave 5 2010/11	Wave 6 2012/13	Wave 7 2014/15	Wave 8 2016/17	Wave 9 2018/19	Wave 10 2021/23
Self-rated memory	~	~	~	~			~	~	~	~
Orientation in time	~	~	~	~	v	~	~	V	~	~
Immediate and delayed recall	~	~	~	~	v	~	~	~	~	~
Prospective memory	~	~	~	~	~			~		
Word-finding (verbal fluency)	~	~	~	~	~		✓	~	~	~
Fluid intelligence (number series)						~		~	~	
Letter cancellation	✓	~	~	~	~					
Numerical ability	✓			~		(🗸)	(🗸)	~		~
Literacy		~			~	(🗸)	(🗸)	~		~
Backwards counting							~	~	~	~
Serial 7s							✓	~	~	~
Object naming							~	~	~	~

Harmonized Cognitive Assessment Protocol (HCAP)

- Comprehensive battery of 20 tests assessing a broad range of cognitive functions
- Administered to 1,273 participants aged 65+ (75.6% RR) in 2018
- Informant interviews for 82.5%
- Protocol identical to HRS
- Algorithmic estimates of dementia and mild cognitive impairment (Manly et al, 2022)
- Data available from UK data service (SN 8502)



ELSA and dementia research

- Density of repeat measures of cognition
- Continued participation after dementia diagnosis
- Multidisciplinary perspective



Socioeconomic gradients and dementia risk

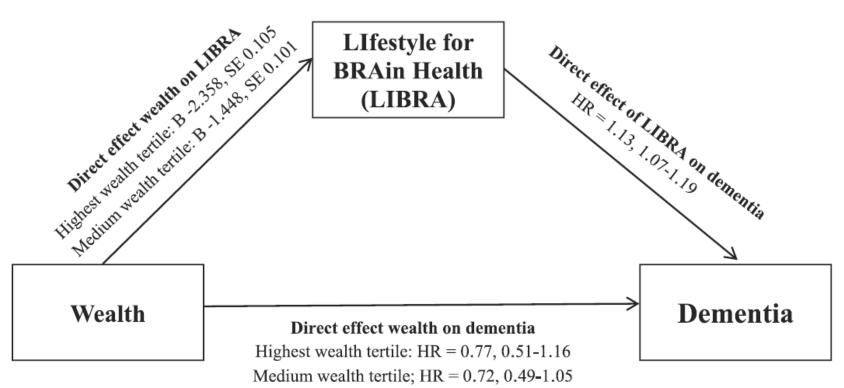
Individual and area-based measures of deprivation

- 12-year follow-up of 6,220 men and women aged 65+
- Relationship between dementia incidence and education, wealth, and index of multiple deprivation
- Financial resources more consistently related to dementia incidence than education, after adjustment for demographics and health indicators
- Area deprivation not robustly associated with dementia risk



Mediation of wealth gradient by lifestyle factors

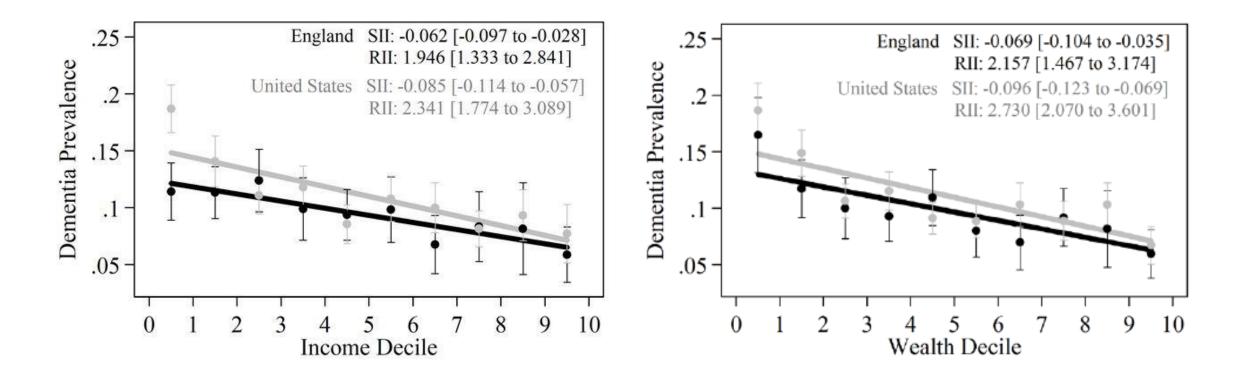
Indirect effect of wealth on dementia via LIBRA Highest wealth tertile: HR = 0.75, 0.66-0.85 Medium wealth tertile: HR = 0.84, 0.78-0.90





Deckers et al, 2019, *J Alz Disease*

SES gradients in England and USA





Arapakis et al, 2021, BMJ Open

Health and health behaviours in dementia risk

- Cardiometabolic risk (Ji et al, 2022; Li et al, 2022; Kontari et al, 2023)
- Multimorbidity (Bendayan et al, 2021)
- Frailty (Rogers et al, 2017)
- Walking speed (Hackett et al, 2018)
- Sensory impairments (Maharani et al, 2018; Davies et al, 2017)
- Body weight (Ma et al, 2020)
- Physical inactivity (Feter et al, 2021; Li et al, 2022)
- Lung function (Qiao et al, 2020)
- Diet (Francis et al, 2022)
- Self-rated health (Stephan et al, 2021)

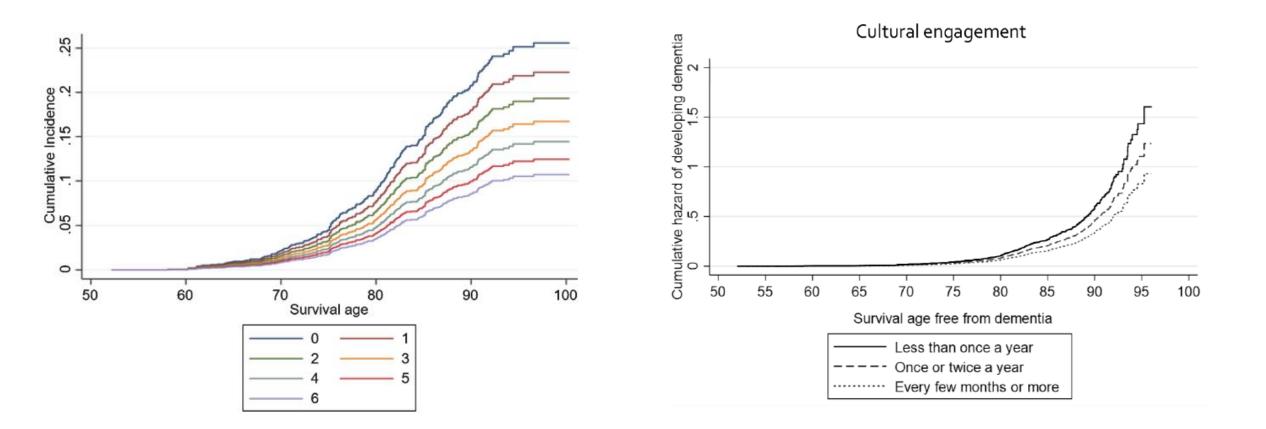


Cognitive stimulation and dementia risk

- Cognitive reserve (Almeida-Meza et al, 2021 a, b)
- Cognitively stimulating activities (Williams et al, 2020)
- Community group engagement (Fancourt et al, 2018)
- Cultural engagement (Fancourt et al, 2020)



Cognitive stimulation and cultural activity





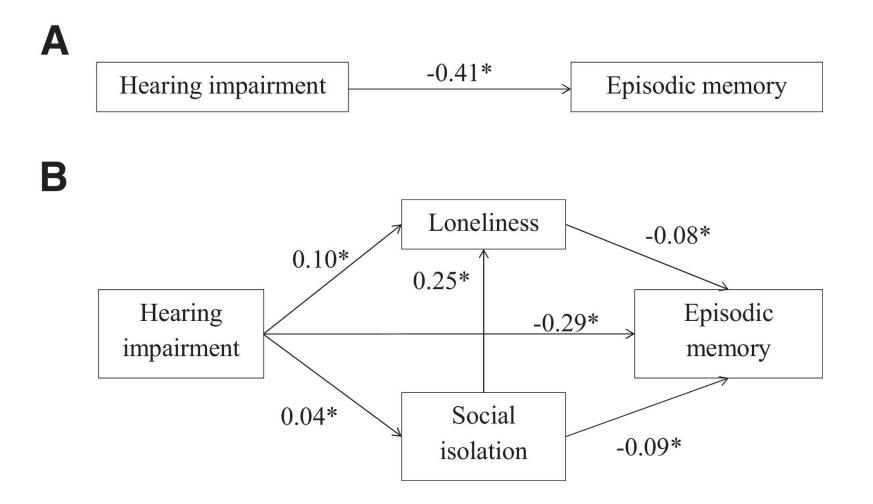
Almeida-Meza et al, 2021, J Alz Disease; Fancourt et al, 2020, J Epid Comm Health

Social isolation and loneliness

- Loneliness as a determinant of dementia (Rafnsson et al, 2020)
- Loneliness trajectories and dementia (Li et al, 2022)
- Negative social interactions with children, other family, and friends and dementia (Khondoker et al, 2017)
- Social isolation, memory decline, and dementia (Duffner et al, 2022; Read et al, 2020)
- Gender-specific associations for family relationships (Scholes & Liao, 2023)
- Loneliness and isolation partly mediate links between hearing impairment and memory decline (Maharani et al, 2019)



Hearing impairment, loneliness, isolation and memory





Other ELSA studies of dementia and cognitive decline

- Modelling research (Ahmadi-Abhari et al, 2017; Bandosz et al, 2020; Collins et al, 2022)
- Care and care needs (Read et al, 2021, 2022)
- Genetic and gene-environment interaction (Ajnakina, 2022; Kepinska et al, 2020)
- Adverse childhood experience (Lowry et al, 2022; O'Shea et al, 2021)
- Depression (Zhu et al, 2022; Jindra et al, 2022)
- Biomarkers (Santoso et al, 2022; Liu et al, 2022; Elpers et al, 2020; Jackowska et al, 2020)
- Air pollution (Wood et al, 2022)
- Job insecurity (Yu et al, 2022)
- Free bus passes and cognitive function (Reinhard et al, 2019)

elsa

Enhancements of the AD/ADRD exposome

- Repeat of HCAP study
- Objective measures of physical activity and sleep
- Proteomic profiling in ~5,000 with nested dementia case-control study
- Extension of life history assessments
- Linkage with air pollution data



Policy implications

- Understanding trajectories of AD/ADRD incidence and prevalence
- Better understanding of the determinants of AD/ADRD and cognitive decline
- Investigation of risk over 20-30 years
- Bringing together multiple perspectives on cognitive decline
- Modelling of health and social care needs
- Identification of new avenues for prevention and treatment



IIIFS

Jonathan Cribb, IFS

11 May 2023

ELSA 20th Anniversary Conference

The Royal Society

@ThelFS

Changing patterns of work at older ages



Economic and Social Research Council

Introduction

II IFS

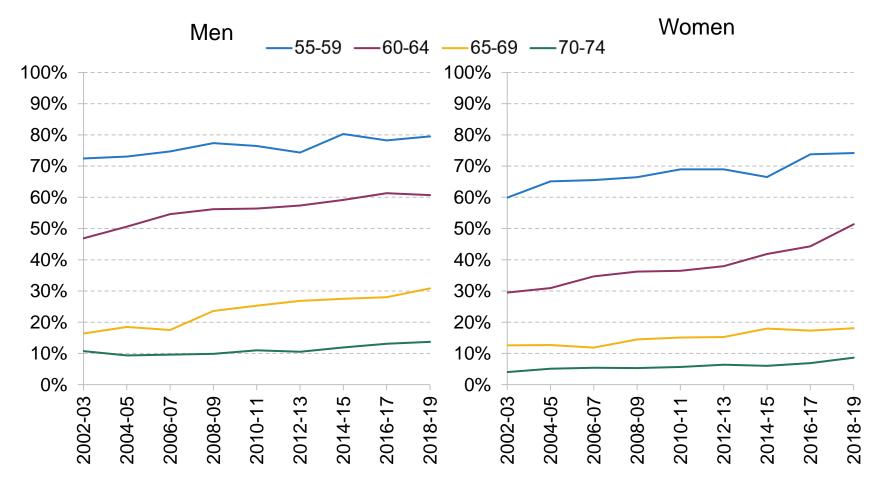
Examine three long-standing changing patterns of work at older ages

- Post-pandemic, some evidence of changes in those trends
- 1. Long run rises in employment at older ages
- 2. Flat/lower rates of disability for those aged 55-74, rising employment for disabled; significant average additional health capacity to work
- 3. More flexibility in work at older ages on a number of dimensions

ELSA will help researchers understand and explain these changes in the world of work

Rising employment rates since 2002; "IIIFS especially women 55-64

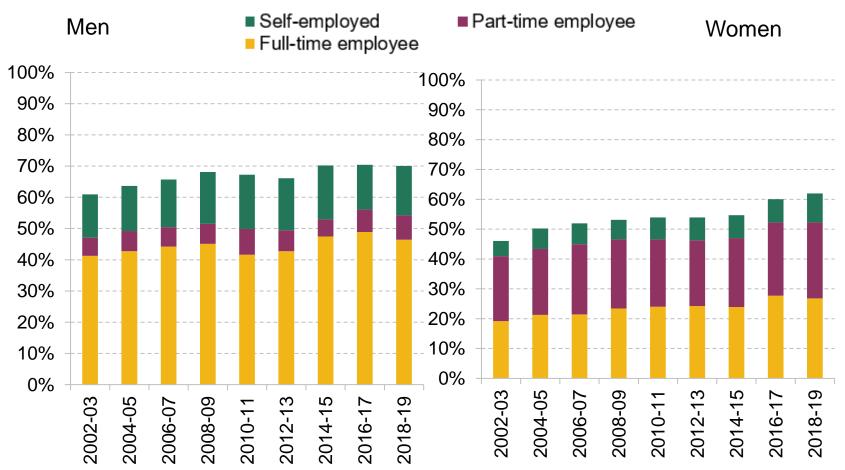
Employment rates of people aged 55 to 74, 2002 to 2019



Source: Author's calculations using ELSA, waves 1-9

Rises in full-time employment; big JIFS gender differences in hours

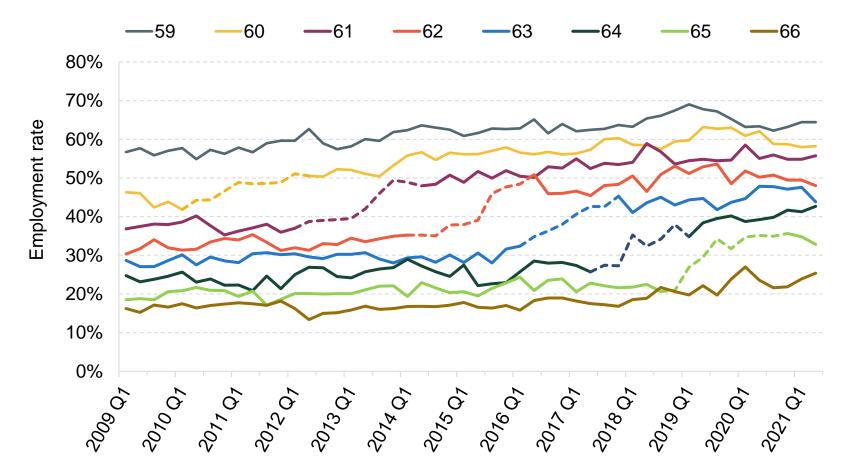
Full-time/ part-time/ self employment, people aged 55 to 64, 2002 to 2019



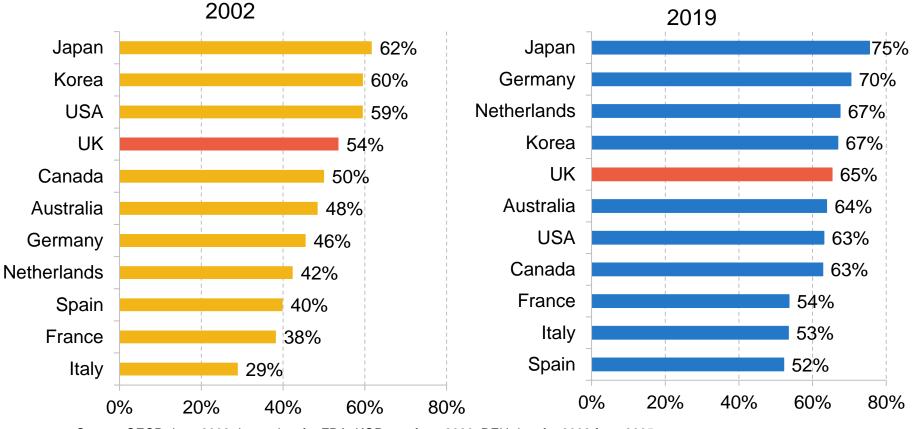
Note: Full-time is working at least 30 hours per week . Source: Author's calculations using ELSA, waves 1-9 © Institute for Fiscal Studies

Some increases in employment caused ulurs by increases in state pension age

Employment rates of women, by single year of age, 2009 to 2021



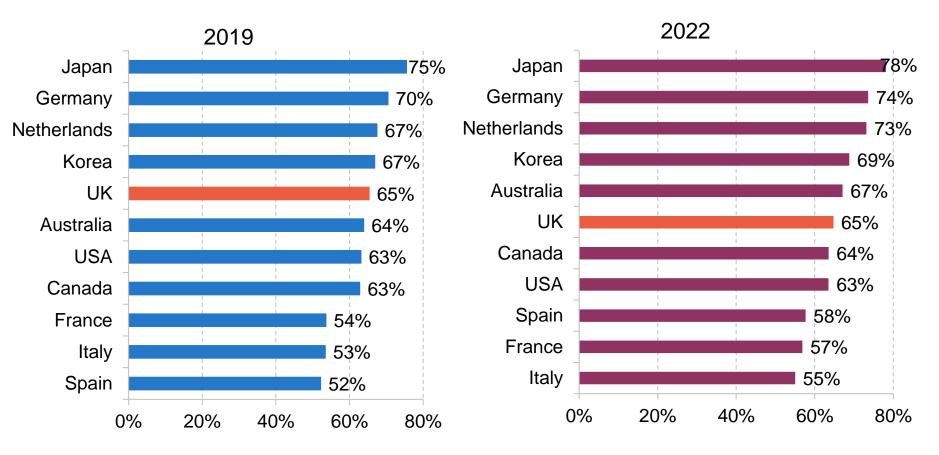
Employment rates of 55-64 year olds, 2002 and 2019, major high-income countries



Source: OECD data. 2002 data points for FRA, KOR, are from 2003. DEU data for 2002 from 2005.

But unusually not risen since pandemic

Employment rates of 55-64 year olds, 2002 and 2019, major high-income countries



Source: OECD data. 2002 data points for FRA, KOR, are from 2003. DEU data for 2002 from 2005.

II IFS

Rise in people aged 50-64 out of labour force

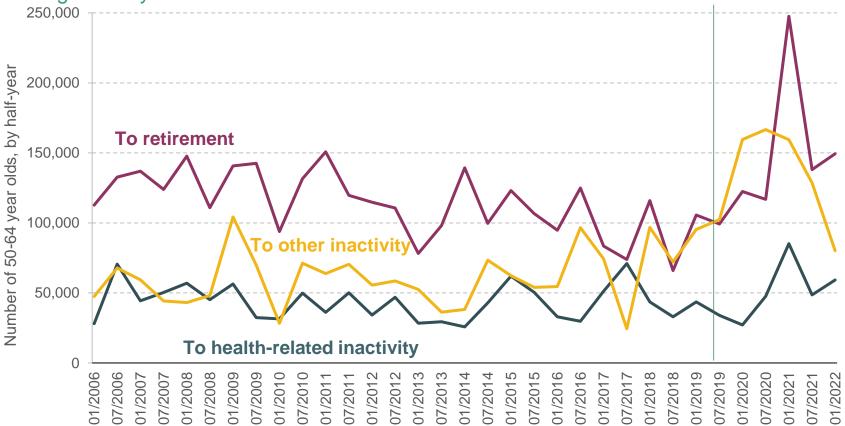
II IFS

Inactivity (non- labour-force participation) rate among 50-64 year olds



Source: Updated version of Boileau and Cribb (2022), using Labour Force Survey. Vertical line indicates last data before pandemic.

Outflows from employment over the course of three months, by half-year, among 50–64 year olds



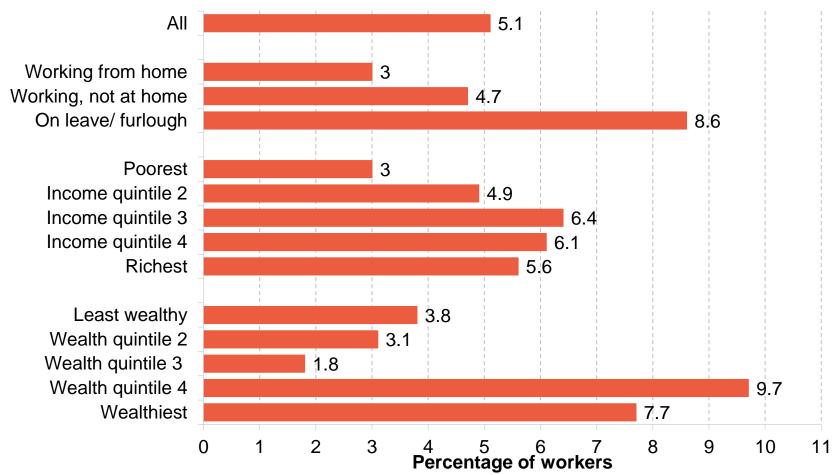
Source: Boileau and Cribb (2022) using Labour Force Survey data. Vertical line indicates last data before pandemic.

Economic inactivity

Some groups more likely to plan to retire earlier

II IFS

Percent of people in employment (age 54+) pre-pandemic who report the pandemic has caused them to plan to retire earlier

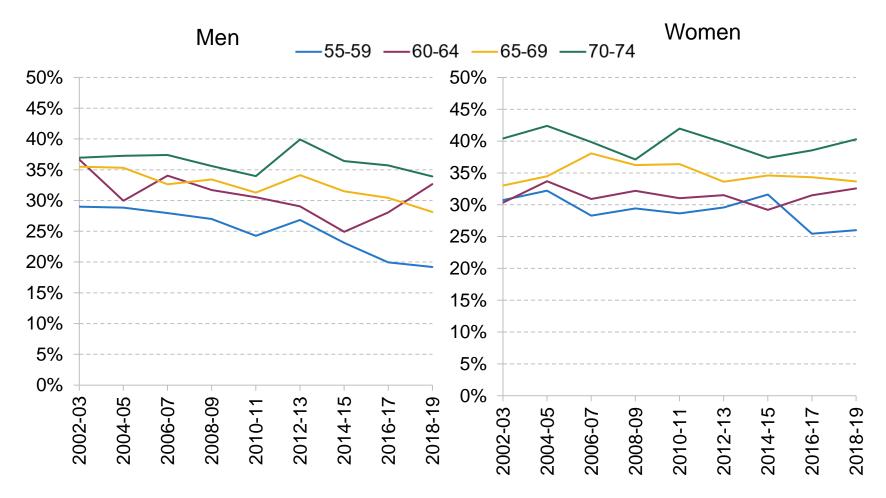


Source: Crawford and Karjalainen (2020) using ELSA covid study wave 1 (June/July 2020).

© Institute for Fiscal Studies

Disability rates for 55-74 year olds Illifs similar to, or lower, than in early 2000s

Disability rates (longstanding & limiting condition), by age and sex, 2002-19

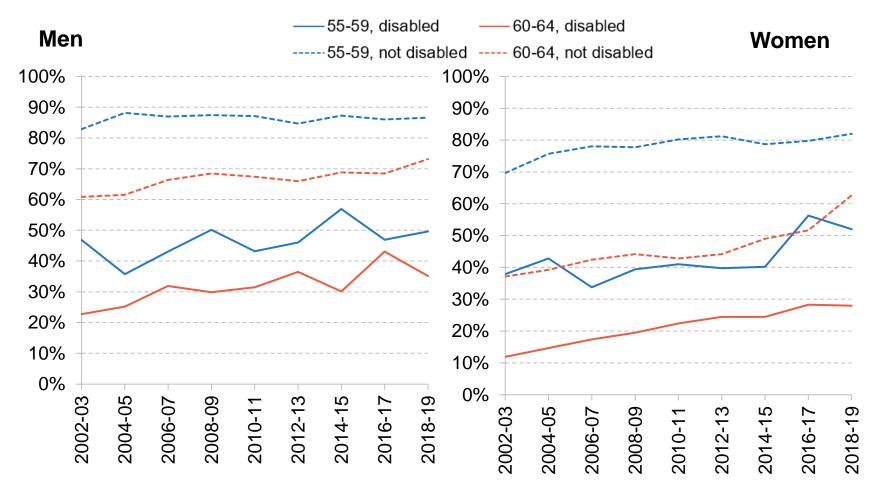


Source: Author's calculations using ELSA, waves 1-9.

Employment rates of disabled people rising from low base



Employment rates by age, sex, and disability status

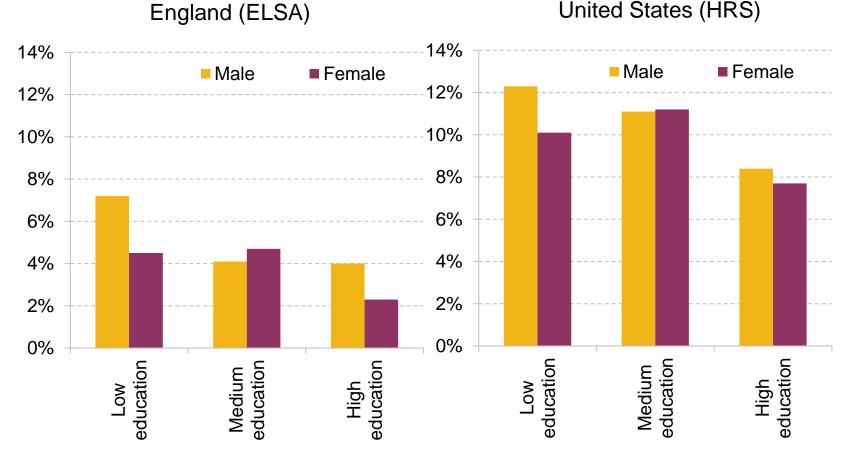


Source: Author's calculations using ELSA, waves 1-9.

Disabled defined as having a longstanding condition which limits their activities.

© Institute for Fiscal Studies

Share of employment decline between ages of 50 and 70 explained by declines in health



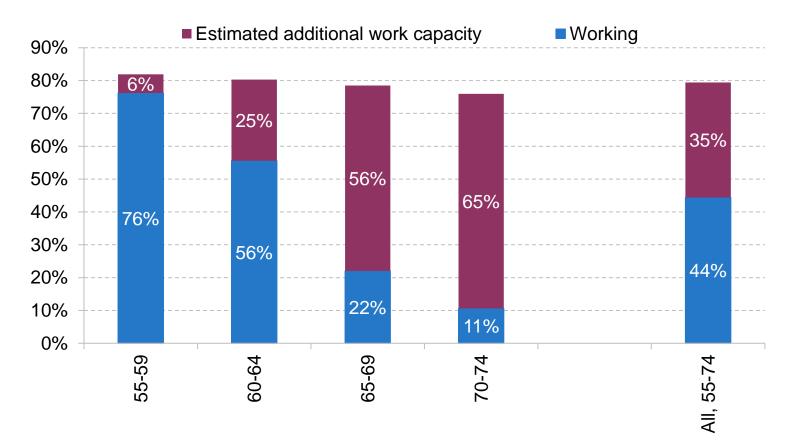
Source: Table 6, Blundell, Britton, Costa Dias, and French (2005);

Note: health measured using subjective health but results robust to various definitions and measures of health. .

© Institute for Fiscal Studies

Significant additional work capacity Illifs for people aged 60-74 in England

Share of men working and estimated additional work capacity for 55-74 year olds given relationship between health and employment of people aged 50-54

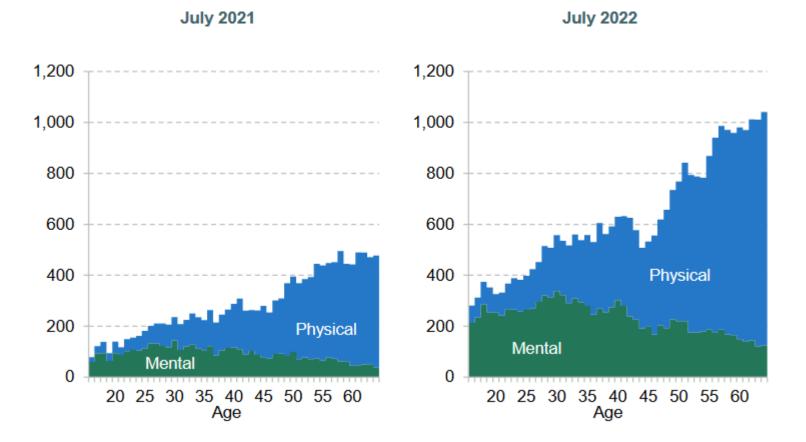


Source: Figure 16, Banks, Emmerson, and Tetlow (2018)

Note: similar results found for women. Other approaches also implies significant health capacity to work.

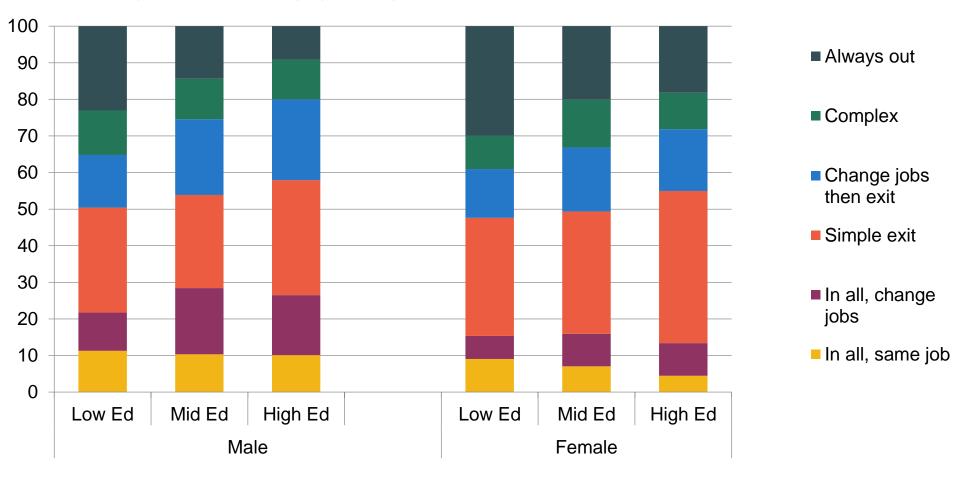
Are there changes post pandemic? IIIFS Large increases in disability ben caseload

Monthly Personal Independence Payments awards by age and type of disability



Source: Joyce, Ray-Chaudhuri and Waters (2022) using DWP Stat-Xplore data. Note: Excludes Scotland

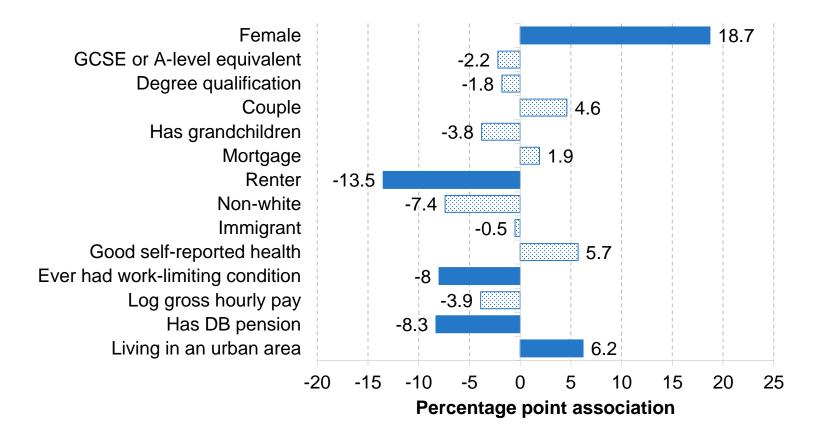
Employment trajectory types by sex and education, 2002-03 to 2014-15



People with DB pension less likely to retire via part-time work

.II IFS

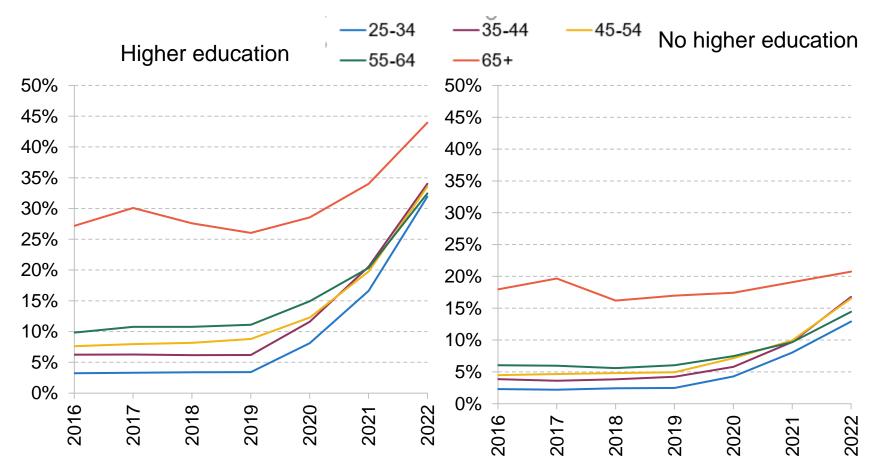
Characteristics associated with gradual retirement (via part-time work) among those aged 50-59 and working full-time in 2002-03



Source: Figure 3.7 of Crawford et al (2021). Also controls for job characteristics (not shown; not statistically different from zero at 5% significance level). Solid bars show effects are statistically different from 0 at 5% significance level.

Increased remote work; though bigger growth for younger workers

Percentage of workers working at least one full day per week, by education



Source: Author's calculations using the Labour Force Survey

II IFS

Conclusion



Falls in labour force participation partially reverses longer run trends towards more work around state pension age. Why?

 ELSA will allow to understand potential roles of furlough; health; access to pension wealth

Pre-pandemic significant potential health capacity to work; but there are inequalities: for sizeable group difficult to work to SPA

Initial evidence of recent changes with ↑ in disability benefit caseloads

Remote work is only one form of flexibility; potentially increased gradual retirement with decline of defined benefit pensions

 ELSA already updated to account for these trends; and will continue to evolve with a changing world of work for people aged 50+ The Institute for Fiscal Studies 7 Ridgmount Street London WC1E 7AE

www.ifs.org.uk





A look ahead

Professor Paola Zaninotto

elsa-project.ac.uk

Aim of ELSA

To provide a nationally representative population research platform for studying the dynamic relationships between

- Socioeconomic position
- Mental and physical health
- > Cognitive function, Alzheimer's disease and other dementias
- Economic and social circumstances
- > Well-being

as people move from work to retirement and into older age.

elsa



Wave 12 (2025/26) and Wave 13 (2027/28)



Interview approximately 11,000 respondents



Refreshment samples of younger people



Enhancing ethnic minority representation



Mode of data collection



Introduce web-first survey methods backed by face-to-face and telephone assessments.



Self completion questionnaire: online and paper



Health visit for the collection of biomedical, genetic and physical performance data



Between main-wave sequential web-CATI surveys

New modules



Climate change attitudes and behaviors



Questionnaire content relevant to the lives of ethnic minority people

migration histories, national, religious and ethnic identity, experiences of discrimination across the life course

elsa

Repeating modules



Accelerometers for objective sleep and physical activity

Objective Hearing tests



Online nutrition assessment





Life history



Focus on Dementia: HCAP3



2028 provide a 10-year interval from HCAP1 and 5-year interval from HCAP2

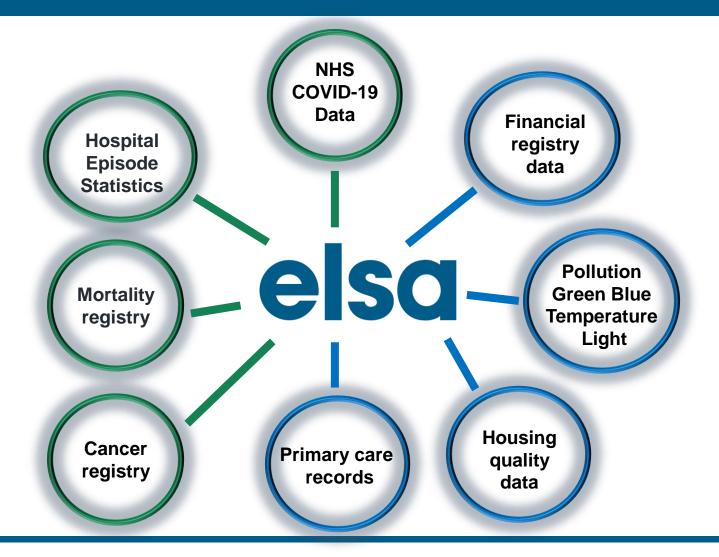
Sample: HCAP1, HCAP2 and new people 65+ predominantly from ethnic minority groups



Content of the interviews will be largely the same as in previous HCAPs to facilitate comparisons.



Linkages



elsa

Thank you for celebrating the 20th anniversary of ELSA with us







