

The English Longitudinal Study of Ageing Wave 8 launch October 2018

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English Longitudinal Study of Ageing

Year	Modality	Sample	Refreshment
Wave 1 (2002/3)	CAPI	12,099	
Wave 2 (2004/5)	CAPI + Nurse visit	9,432 + 7,666	
Wave 3 (2006/7)	CAPI	9,771	HSE 2001-4
Wave 4 (2008/9)	CAPI + Nurse visit	11,050 + 8,643	HSE 2006
Wave 5 (2010/11)	CAPI	10,274	
Wave 6 (2012/13)	CAPI + Nurse visit	10,601 + 8,054	HSE 2009-11
Wave 7 (2014/5)	CAPI	9,666	HSE 20011-12
Wave 8 (2016/17)	CAPI + Nurse visit (50%)	8,445 + 3,525	

Wave 8 (2016/17) new content

- Pensions questions about taking lump sums from pensions
- Risk preferences in financial and health domains

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Wave 8 (2016/17) new content

- Pensions questions about taking lump sums from pensions
- Risk preferences in financial and health domains
- Grandparenting, generativity and legacy
- Additional internet use questions
- Whether the respondent voted in general election
- Perceived body weight and trying to lose weight
- Quality of senses of taste and smell

Wave 8 (2016/17) reintroduced content

- Sexual Relationships and Activities Questionnaire
- Fluid intelligence
- Sleep questions
- Weight measurement moved into CAPI
- Nurse visit
 - Blood pressure, grip strength, blood sampling
 - No height, lung function, chair stands, or balance
 - Additional PaxGene tube for gene expression analysis

Healthy Cognitive Aging Project (HCAP)

- Designed to measure key domains of cognitive function affected by ageing, so as to estimate more precisely the prevalence of mild cognitive impairment and dementia
- International initiative, involving the Health and Retirement study, and other national studies from the HRS family
- Administration of the Harmonised Cognitive Assessment Protocol to a subset of ELSA participants
- Supports joint epidemiological analysis of the aetiology and impact of cognitive decline
- Compute national estimates of the prevalence of demential using comparable data

Implementation of HCAP in ELSA

- 1,274 productive interviews (75.3% response rate)
- 1,180 nominated an informant
 - > 1,137 informant interviews (paper and telephone respondents)
 - > 96% of nominated cases, 89% of productive cases

ELSA polygenic risk scores

- Genome wide genotyping of 7,597 participants
- Illumina HumanOmni2.5 BeadChip
- 2.5 million SNPs
- Duplicates, ethnic outliers and related individuals reduced sample to 7,412
- After quality control, sample is 7,224

Genetic variants linked to education predict longevity

Riccardo E. Marioni^{a,b,c,1,2}, Stuart J. Ritchie^{a,d,1}, Peter K. Joshi^{e,1}, Saskia P. Hagenaars^{a,d,f}, Aysu Okbay^{g,h,i}, Krista Fischer^j, Mark J. Adams^f, W. David Hill^{a,d}, Gail Davies^{a,d}, Social Science Genetic Association Consortium³, Reka Nagy^k, Carmen Amador^k, Kristi Läll^{j,l}, Andres Metspalu^j, David C. Liewald^{a,d}, Archie Campbell^b, James F. Wilson^{e,k}, Caroline Hayward^k, Tõnu Esko^{j,l,m,n}, David J. Porteous^{a,b}, Catharine R. Gale^{a,d,o,4}, and Ian J. Deary^{a,d,4}

PNAS November 22, 2016

Genetic analysis of social-class mobility in five longitudinal studies

Daniel W. Belsky^{a,b,1,2}, Benjamin W. Domingue^{c,1}, Robbee Wedow^d, Louise Arseneault^e, Jason D. Boardman^d, Avshalom Caspi^{e,f,g,h}, Dalton Conleyⁱ, Jason M. Fletcher^{j,k}, Jeremy Freese^l, Pamela Herd^j, Terrie E. Moffitt^{e,f,g,h}, Richie Poulton^m, Kamil Sicinski^k, Jasmin Wertz^f, and Kathleen Mullan Harris^{n,o,2}

PNAS | vol. 115 | no. 31

Genetic Heterogeneity in Depressive Symptoms Following the Death of a Spouse: Polygenic Score Analysis of the U.S. Health and Retirement Study

Benjamin W. Domingue, Ph.D., Hexuan Liu, Ph.D., Aysu Okbay, Ph.D., Daniel W. Belsky, Ph.D.

Am J Psychiatry 2017; 174:963-970; o

Education can reduce health differences related to genetic risk of obesity

Silvia H. Barcellos^{a,1}, Leandro S. Carvalho^a, and Patrick Turley^{b,1}

www.pnas.org/cgi/doi/10.1073/pnas.1802909115

ELSA polygenic risk scores

- Years of education
- Smoking behaviour
 - Ever smoked
 - N cigarettes
- Depressive symptoms
- Neuroticism
- Subjective wellbeing
- General cognition

- Coronary artery disease
- Type 2 diabetes
- Alzheimer's disease
- Height
- Body mass index
- Waist circumference
- Waist/hip ratio

ELSA: Data linkage

- Mortality and cancer incidence up to April 2018
- Hospital Episode Statistics up to January 2018
- National Insurance contributions up to 2003
- DWP benefits data in progress

Wave 8 funding

- Division of Behavioral and Social Research,
 National Institute on Aging
- Government Departments coordinated by the ESRC
 - Department of Health and Social Care
 - Department of Work and Pensions
 - Department of Transport