

Cognitive decline and financial outcomes in retirement

**Tuesday 2nd December
10:00 - 11:00**



IFS Retirement Saving Consortium





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@TheIFS

Cognitive decline and financial outcomes in retirement

- As life expectancy gradually increases
 - Many more people living to much older ages
 - Risk of cognitive decline increases significantly
- Navigating financial decision-making before and after retirement is increasingly complicated
 - Many people approaching retirement have “defined contribution” pension pots – don’t automatically provide an income for life
- → Growing number of older people having to make active financial decisions into advanced ages where risk of cognitive decline is high

Research questions

- **What are the patterns of cognitive decline at older ages?**
- **How is cognitive decline associated with changes in financial wealth later on?**

Data and sample



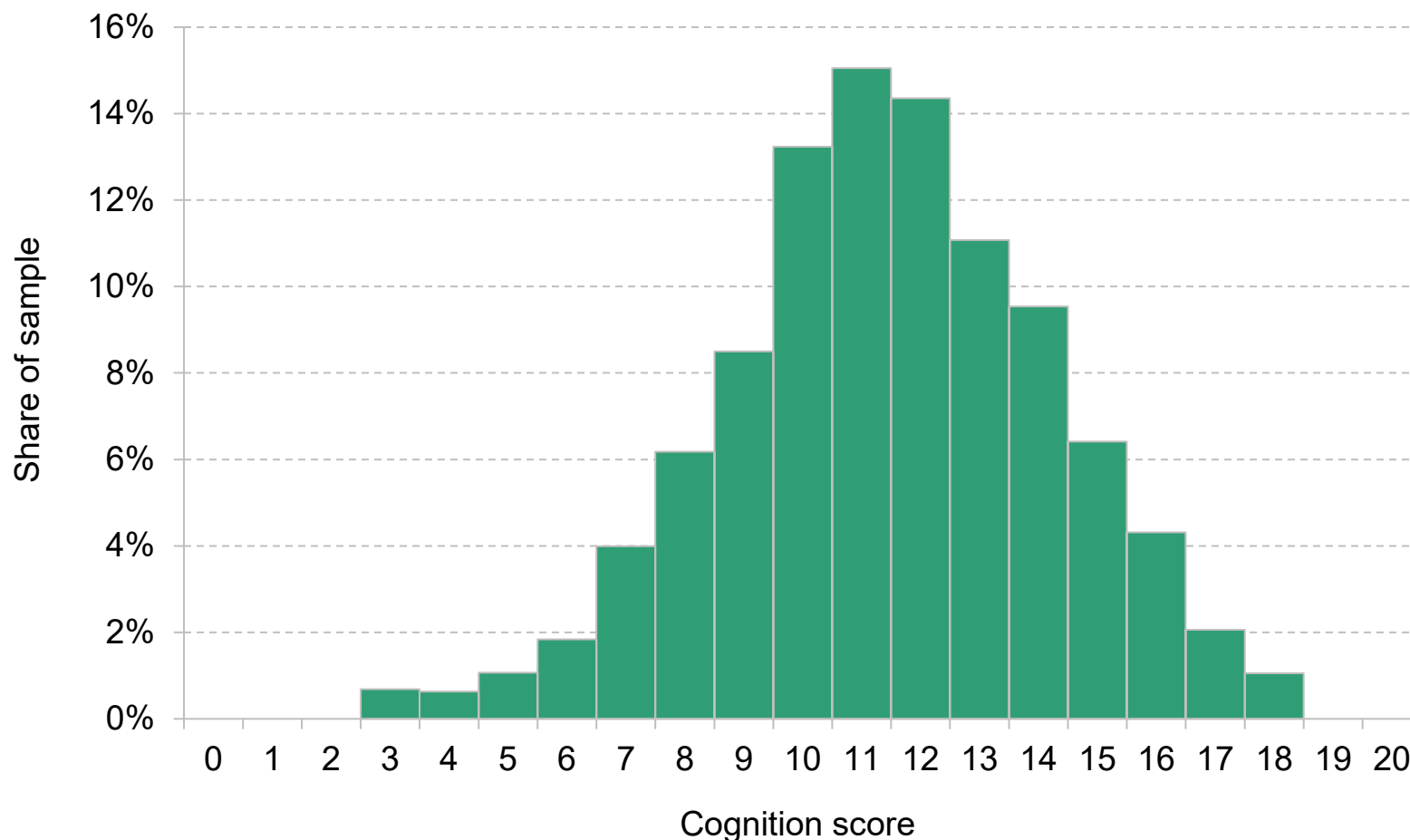
- **Data: ELSA** (English Longitudinal Study of Ageing)
 - Nationally representative sample of the 50+ population of England
- We follow the same people over 20 years from 2002-03 to 2021-23
 - Focus on those aged 50-69 in 2002 (born 1932 to 1952)
- We define wealth as 'net financial wealth', which covers all savings less financial debt (excluding housing or pensions)
- Our main cognition score is defined based on a memory test
 - People are read a list of 10 words, and asked to repeat as many as they can immediately and later in the survey
 - We add the scores from these two tests together

Word list example

“Now please tell me the words you
can recall”

Distribution of memory scores

Individuals aged 50–69 in 2002–03

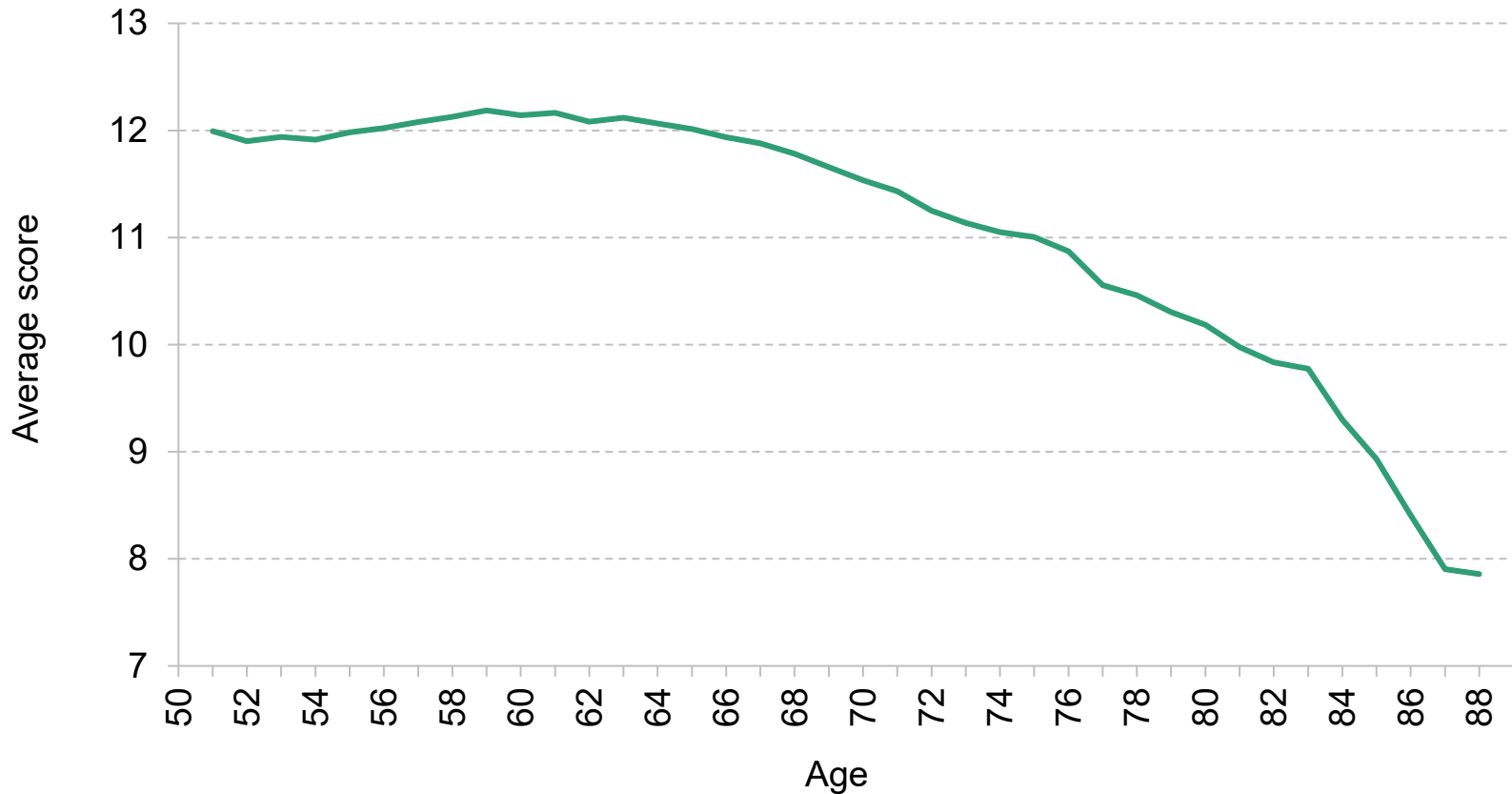


Note: Cognition score defined as the sum of immediate and delayed word recall tests. Sample of those observed in every wave, 1 to 10.

Source: Figure 1 of Karjalainen, 2025.

Average cognition score by age

Mean cognition (word recall) score out of 20, by age



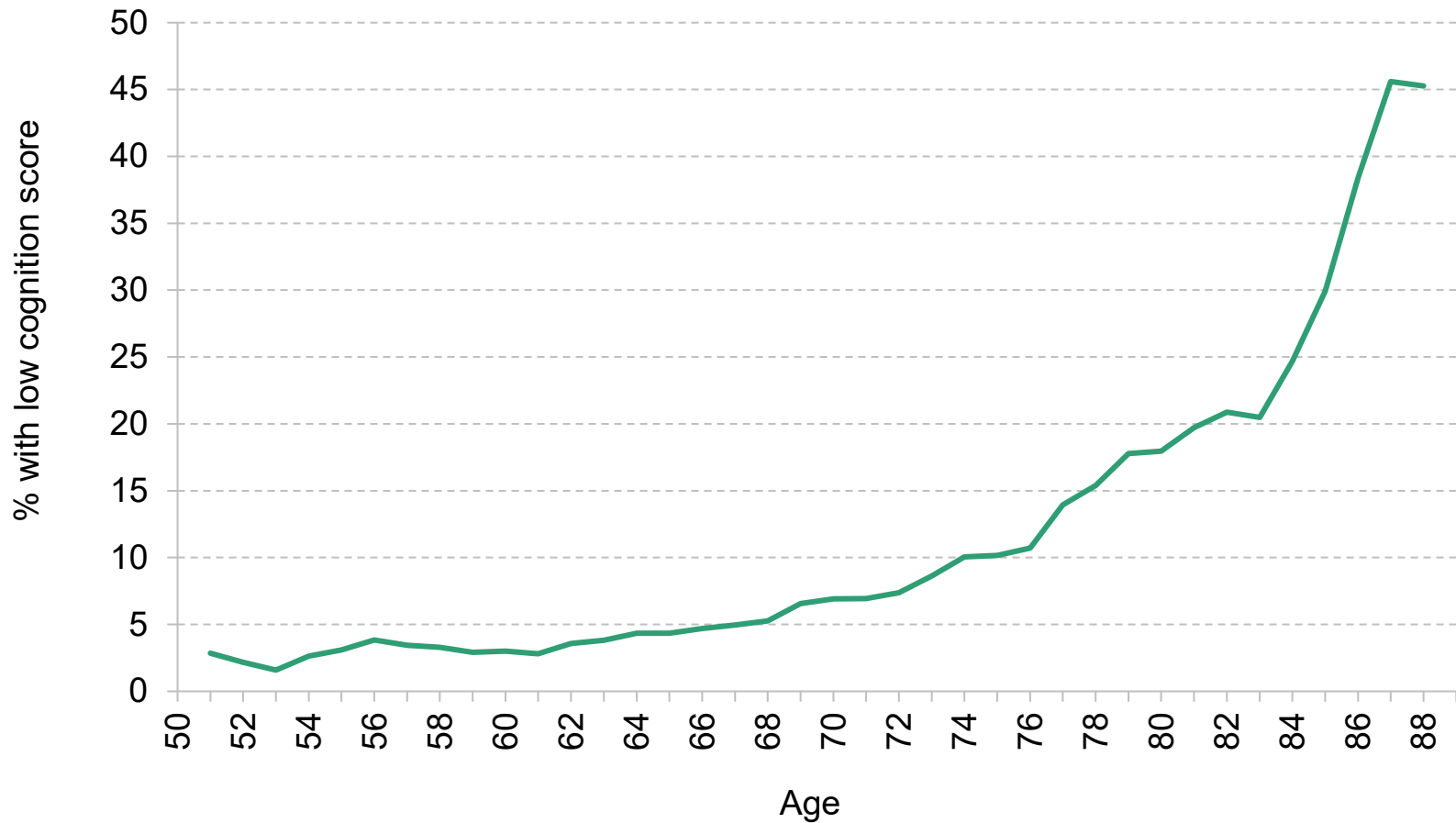
Source: Figure 2 of Karjalainen 2025.

Low cognition measure



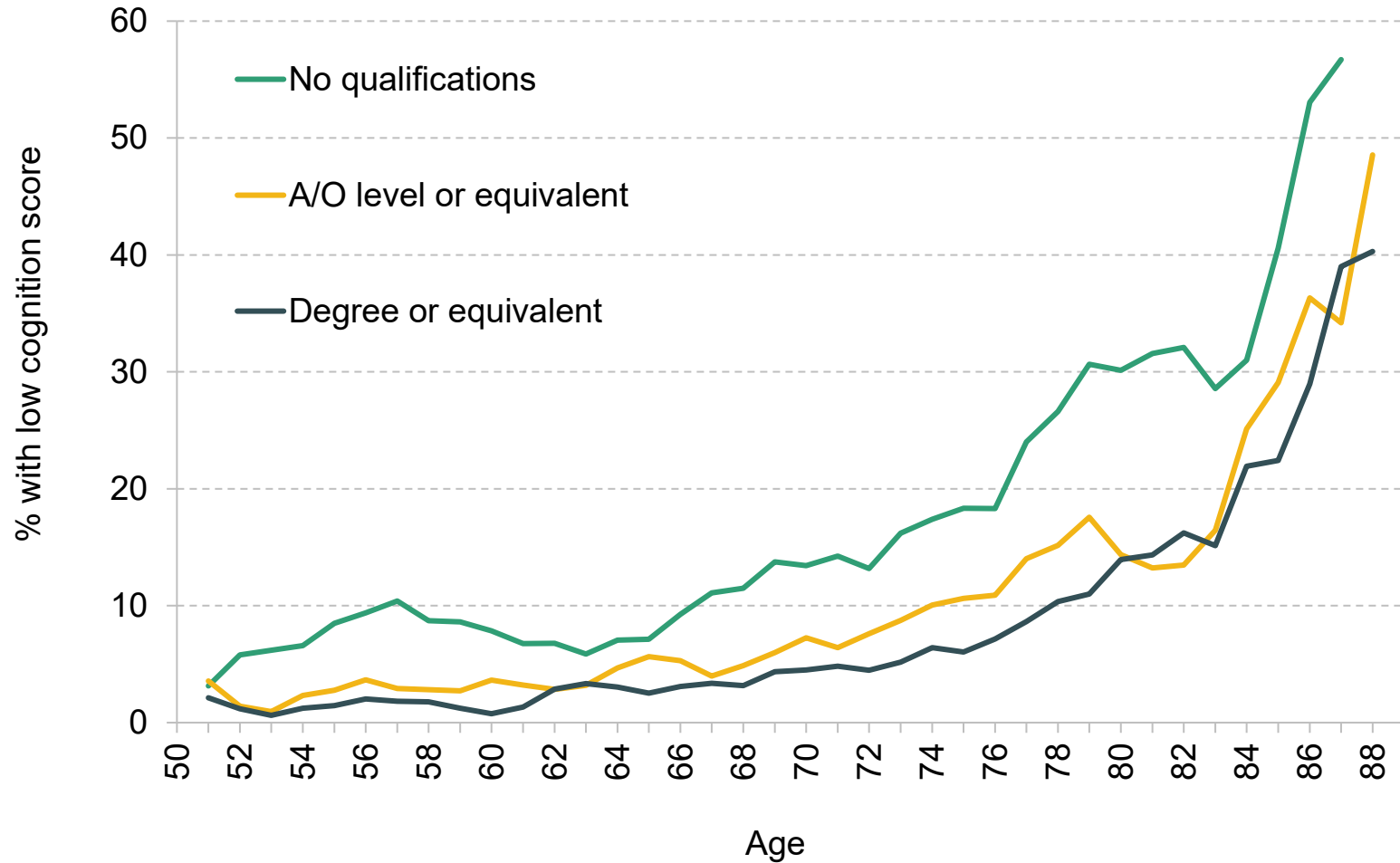
- What is likely to matter most for financial decision-making is reaching a level of low cognition, rather than decline itself
- We define as 'low cognition' having a score of less than 7 in the memory test (out of maximum score of 20)
 - This means being in the bottom ~3% of those aged 50 to 59

Prevalence of low memory score, by age



Source: Figure 3 of Karjalainen 2025.

Differences by education



Source: Figure 4 of Karjalainen 2025.

Cognition and financial outcomes



- We compare trajectories of financial wealth for similar people in terms of characteristics who do, and do not, experience cognitive decline
- We control for **time** and:
 - **Demographic** characteristics (sex, age, education, partner status, kids, housing tenure, region, health: functional limitations, high depressive score)
 - **Baseline** characteristics observed at age 50 to 69 (in paid work, cognition and numeracy scores, who manages finances, wealth quartile, whether has risky assets, DB wealth, DC wealth, whether receiving care)
 - **Partner** characteristics (age, whether partner has low cognition)

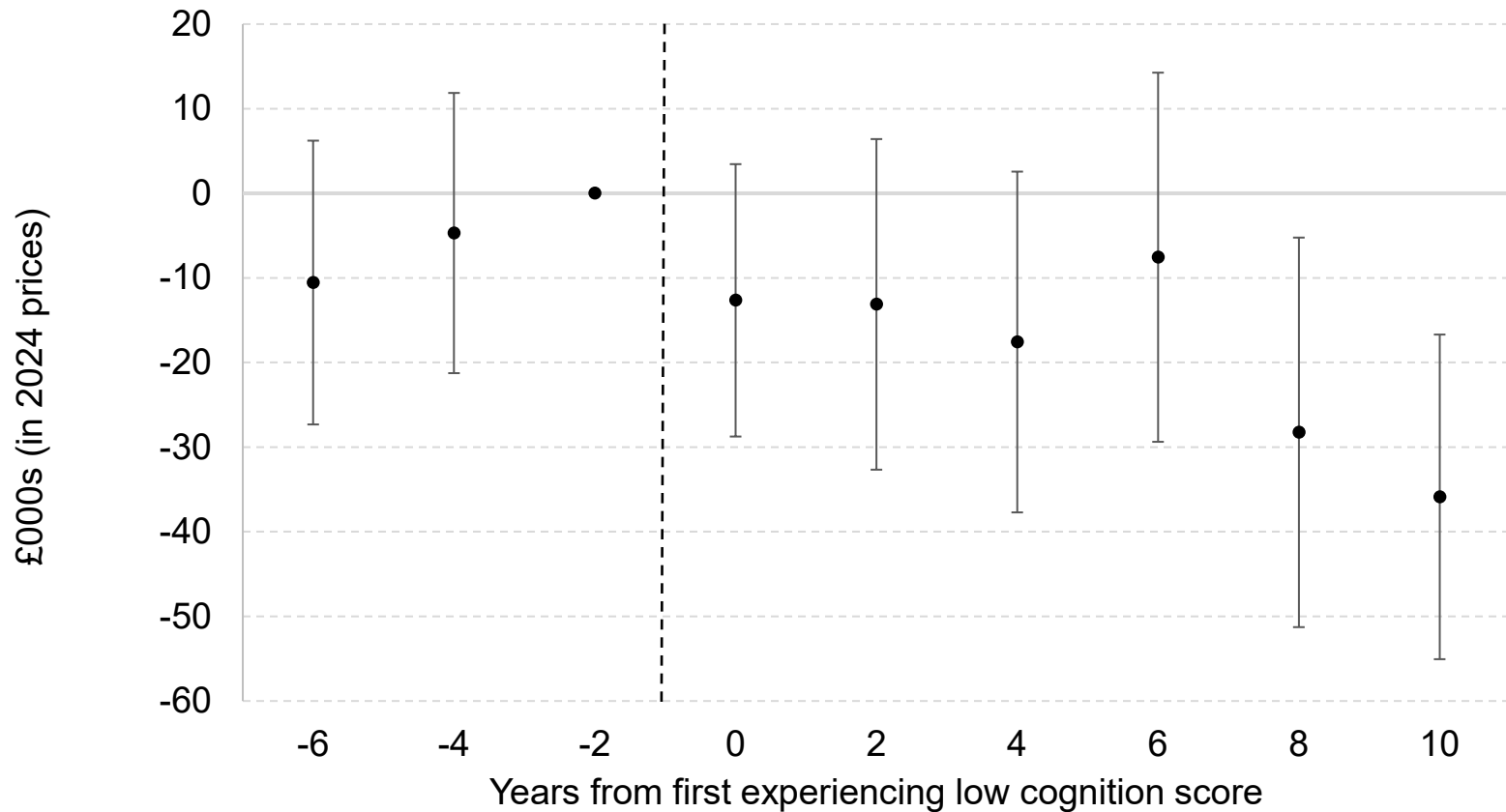
Cognition and financial outcomes



- Think about how financial wealth changes before and after the first point the respondent has low cognition
 - Compare those who did, and did not experience cognitive decline
- Results should be carefully interpreted – not necessarily all just due to the change in cognition

Change in financial wealth

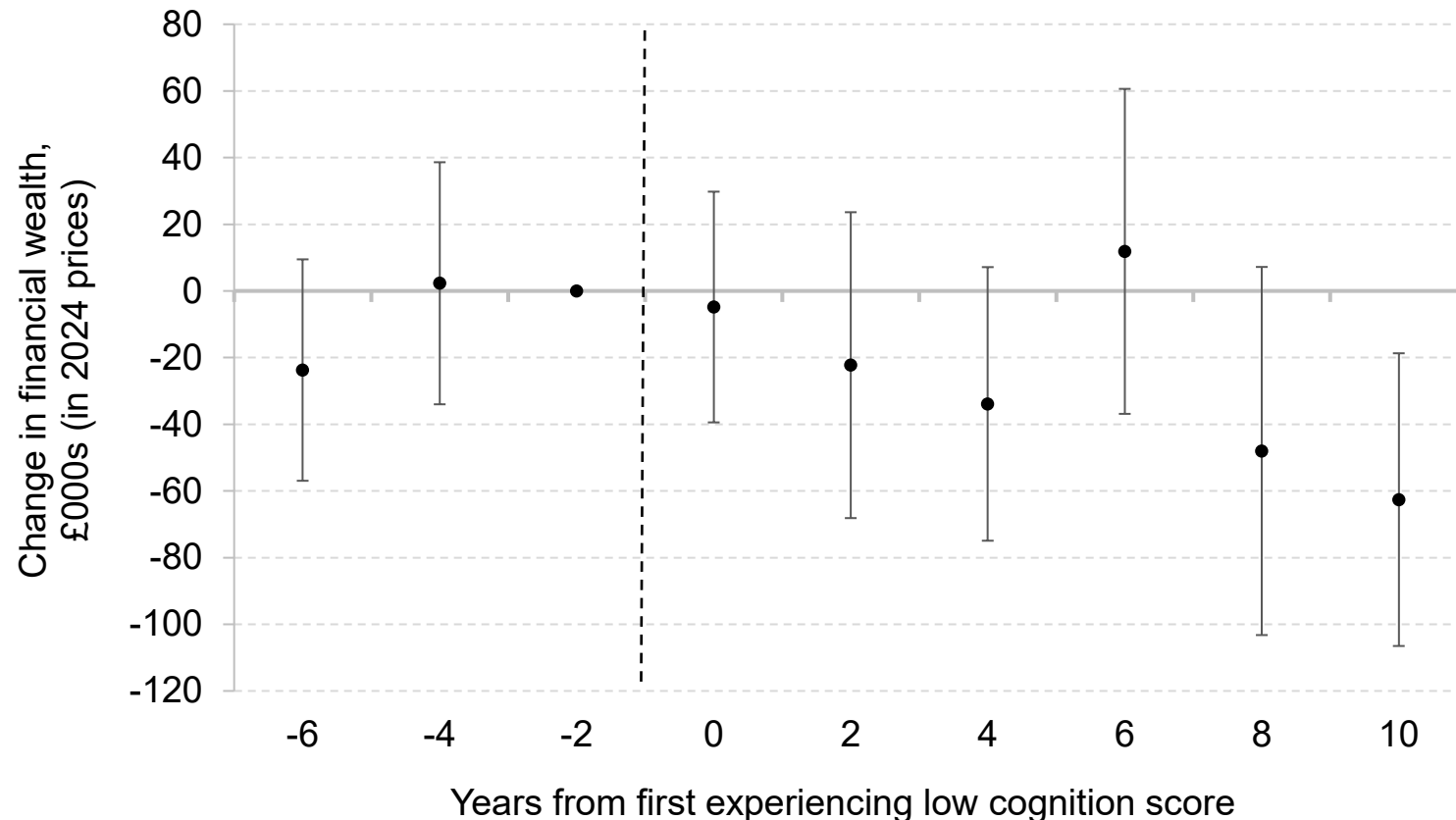
In £000s, by years since first low cognition score



Notes: Estimated coefficients from an event study. Outcome variable is net financial year. Estimation includes controls listed above. The bars indicate the 95% confidence intervals.

Change in financial wealth – higher than median wealth

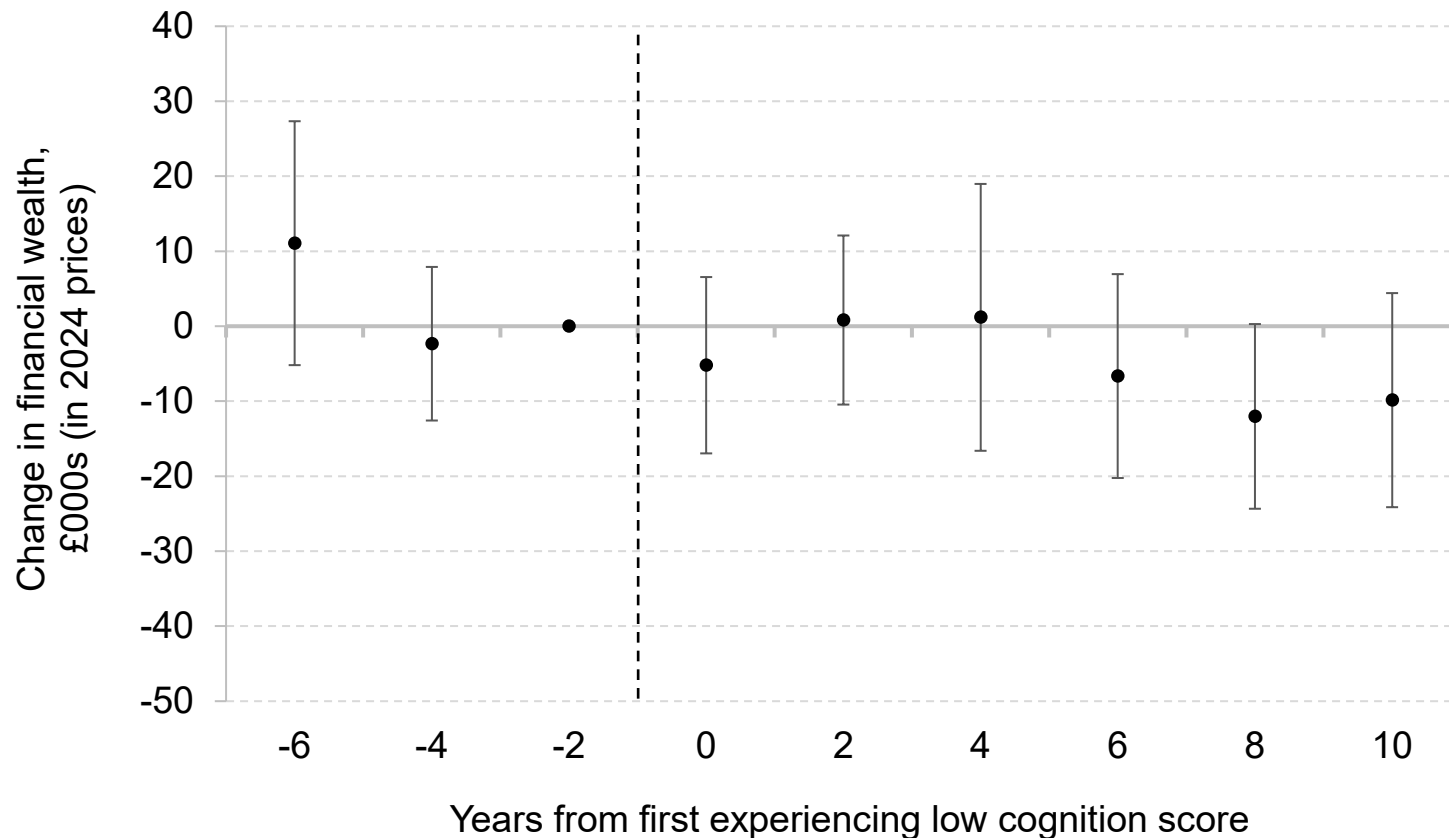
In £000s, by years since first low cognition score



Notes: Estimated coefficients from an event study. Outcome variable is log net financial wealth, the estimates are shown as percentage change in wealth. Estimation includes controls listed above. The bars indicate the 95% confidence intervals.

Change in financial wealth – lower than median wealth

In £000s, by years since first low cognition score



Notes: Estimated coefficients from an event study. Outcome variable is log net financial wealth, the estimates are shown as percentage change in wealth. Estimation includes controls listed above. The bars indicate the 95% confidence intervals.

Potential mechanisms?

- These results are *not* driven by those receiving formal care (outside of a care home)
- Cannot be explained by changes to reported transfers (to family, friends, charity) – these also fall
- → The exact mechanisms behind the decline in net financial wealth are not yet clear
- The reductions could be a sensible response to worsening cognition where people decide to spend down their wealth more quickly
- On the other hand, related research from other countries finds that the likelihood of financial mistakes increases with age

- These results suggest that there is potential for policy to **do more to protect financial security in later life**
- Fewer people have a guaranteed income stream in retirement
- In the next few years, new regulations will require UK pension funds to provide a default retirement income product to their members
 - ‘Flex-then-fix’ type products could help make financial decisions in older age easier
- Other types of early planning could also help mitigate risks – role for individuals and families thinking ahead as well

Conclusion



- We find that risk of cognitive decline is high at advanced ages, and this is true across different groups
- Those experiencing low cognition have lower levels of wealth in later years – although this difference appears gradually
- Our findings suggest that higher level of wealth exposes people to larger declines in wealth
- Effects emerge gradually rather than sharply → indicates there is a window for intervention to help prepare people

Word list example



- Butter
- Arm
- Shore
- Letter
- Queen
- Cabin
- Grass
- Pole
- Ticket
- Engine

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