



Early-life adversity, cardiovascular health, and later-life cognition in ELSA cohort

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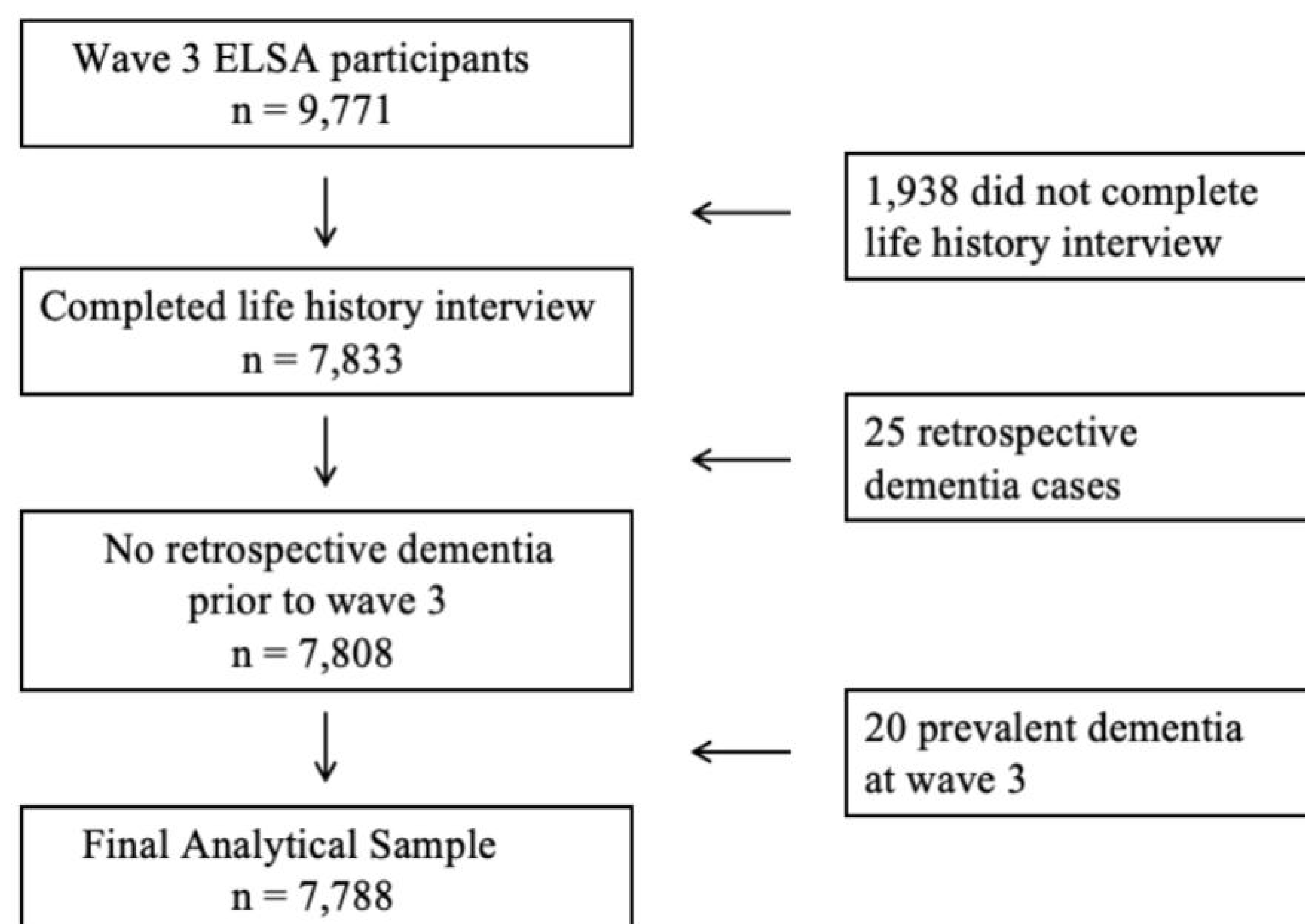


Background

- ACEs are linked to both cardiovascular disease and cognitive ageing, yet their association with cognition is inconsistent.
- Cardiovascular disease is a plausible but rarely tested pathway.
- This cross-sectional study tests whether ACE-cognition associations vary by ACE operationalisation, and whether cardiovascular burden mediates them.

Methods

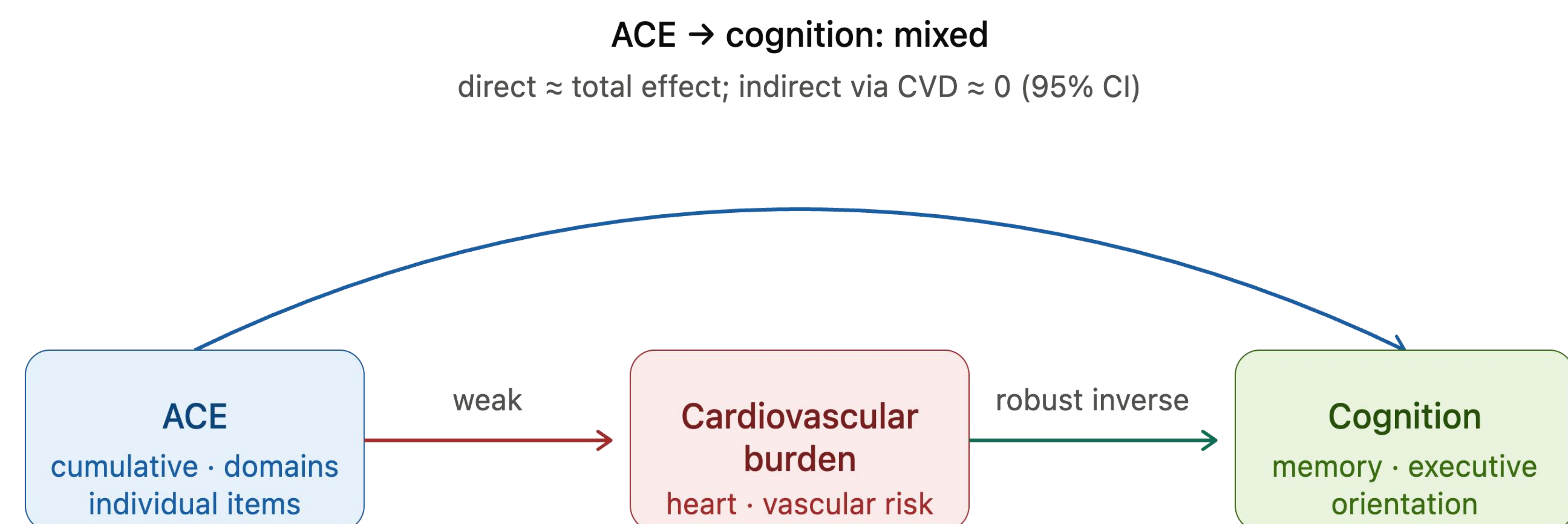
- ELSA Wave 3 (2006–07);
- Multivariable linear regression and causal mediation analyses;
- N = 7,788 (≥50y).



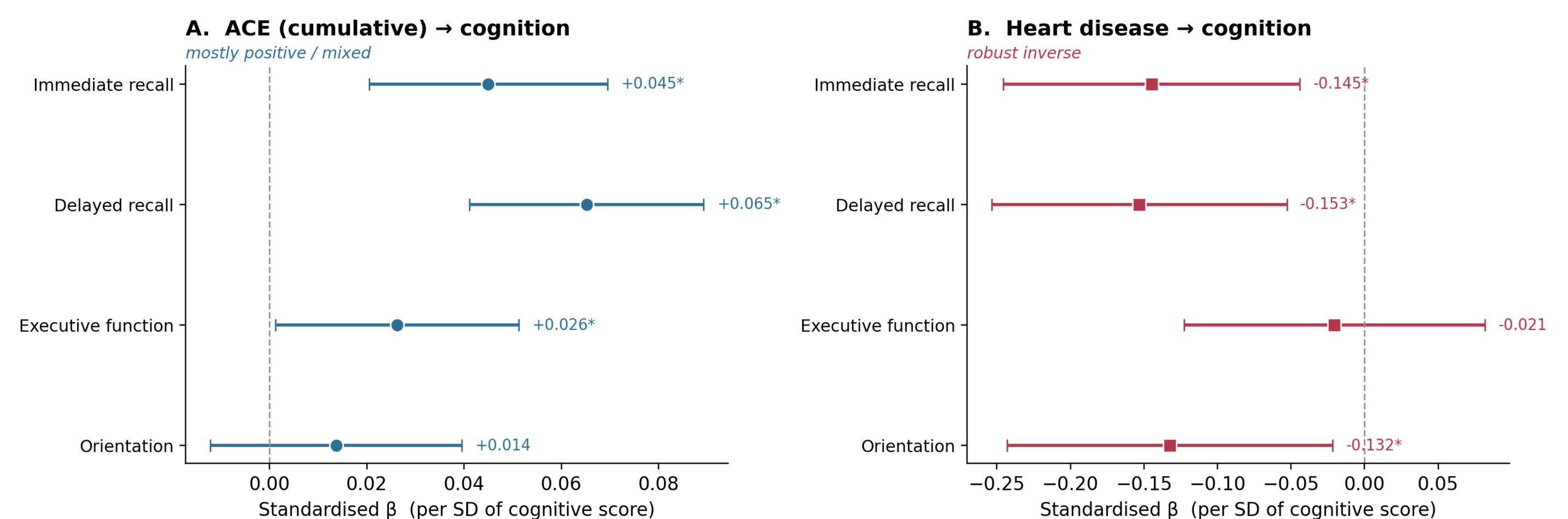
Flowchart of participant selection

Key findings

- ❖ **ACE (mixed)** → abuse - worse cognition, illness/household/SES - better cognition (selective survival).
- ❖ **Cardiovascular burden** → poorer cognition, robust for memory.
- ❖ **Mediation**: cardiovascular burden does not explain the ACE-cognition link, indirect via CVD ≈ 0 (95% CI).



Proposed life-course vascular pathway (cross-sectional)



Conclusion

Cross-sectional and hypothesis-generating: ACE-cognition associations are heterogeneous across operationalisations and not mediated by cardiovascular burden, informing further study.