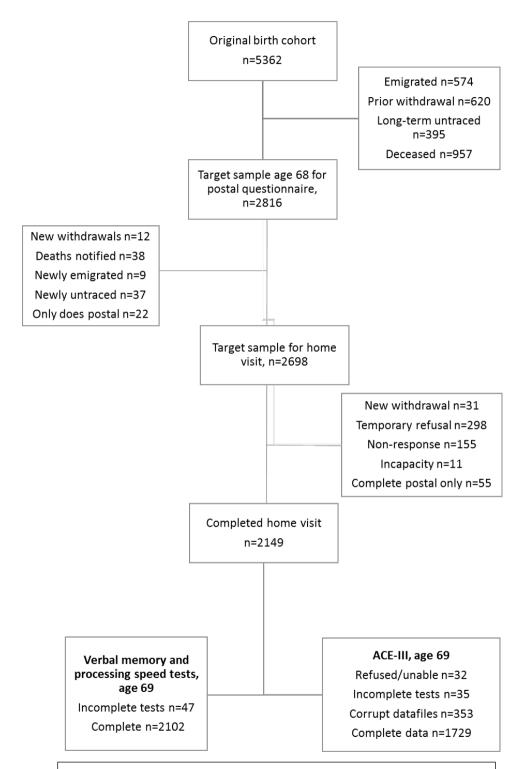
Electronic Supplementary Material (ESM)

ESM Fig. 1: Flow diagram of target samples for the postal questionnaire at age 68 and home visit at age 69 (amended from Kuh et al. 2017).¹

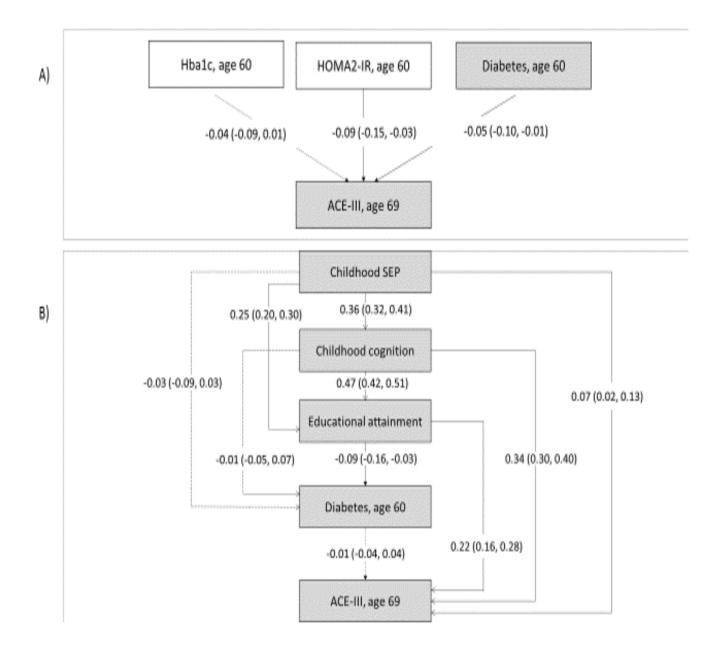


Analysis sample:

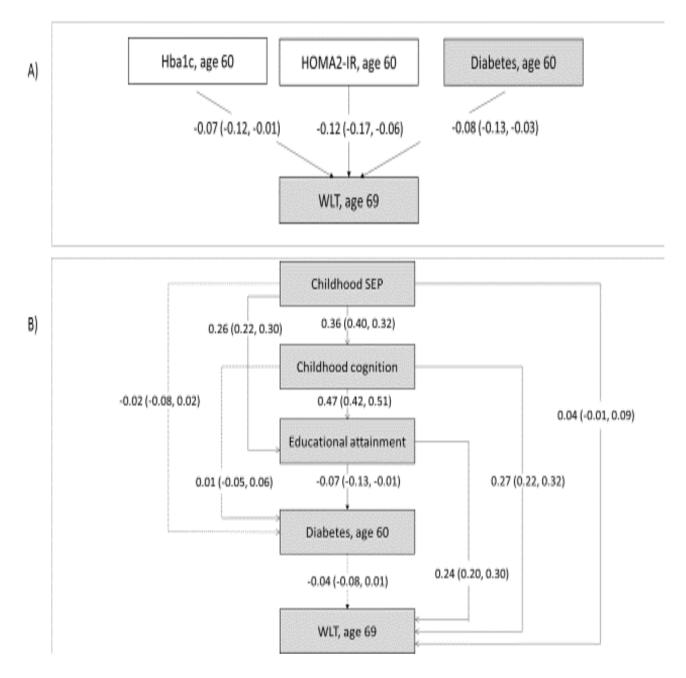
- >=1 measure of earlier life (education, cognition, SEP)
- >=1 measure of midlife diabetes (diabetes, insulin or hyperglycaemia at age 60-64)
- >=1 measure of cognitive function at age 69 (ACE-III, verbal memory)

Max n=1803

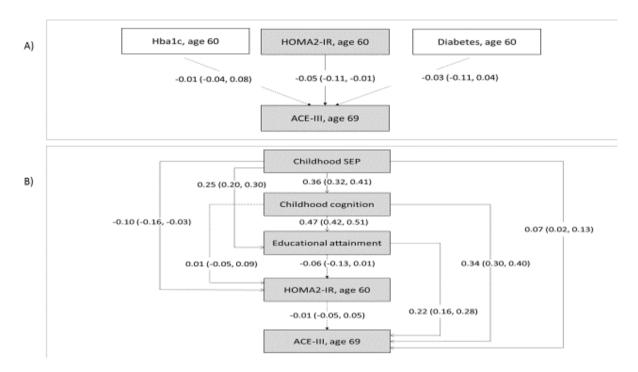
ESM Fig. 2: A) Simple path models for midlife type 2 diabetes to later-life ACE-III B) Path model for the ACE-III in relation to childhood cognition, childhood SEP, educational attainment; with midlife type 2 diabetes. All path coefficients are standardized and are mutually independent and adjusted for sex. Dashed lines represent non-significant paths at the 5% level (p>0.05).



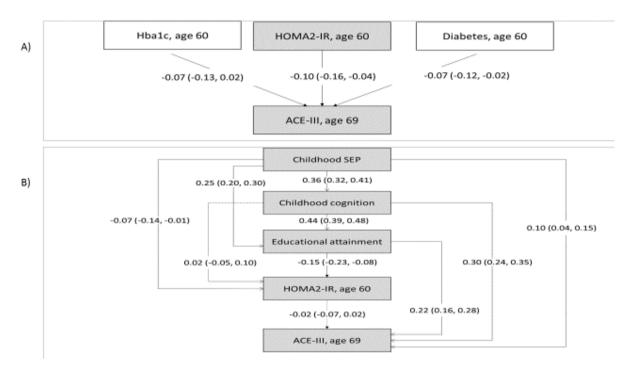
ESM Fig. 3: A) Simple path models for sex-adjusted coefficients from midlife type 2 diabetes to later-life word learning test (WLT, memory) B) Path model for the WLT in relation to childhood cognition, childhood SEP, educational attainment; with midlife type 2 diabetes. All path coefficients are standardized and are mutually independent and adjusted for sex. Dashed lines represent non-significant paths at the 5% level (p>0.05).



ESM Fig. 4: A) Simple path models for HOMA2-IR to later-life ACE-III (cognitive state) B) Path model for the ACE-III in relation to childhood cognition, childhood SEP, educational attainment; with midlife HOMA2-IR. All path coefficients are standardized and are mutually independent and adjusted for sex and medication use. Dashed lines represent non-significant paths at the 5% level (p>0.05).



ESM Fig. 5: A) Simple path models for HOMA2-IR to later-life ACE-III (cognitive state) B) Path model for the ACE-III in relation to childhood cognition, childhood SEP, educational attainment; with midlife HOMA2-IR. All path coefficients are standardized and are mutually independent and adjusted for sex and excluding those with ACE-III scores<82. Dashed lines represent non-significant paths at the 5% level (p>0.05).



ESM Fig. 6: A) Simple path models for HOMA2-IR to later-life ACE-III (cognitive state) B) Path model for the ACE-III in relation to childhood cognition, childhood SEP, educational attainment; with midlife HOMA2-IR. All path coefficients are standardized and are mutually independent and adjusted for sex and duration of type 2 diabetes. Dashed lines represent non-significant paths at the 5% level (p>0.05).

