

Additional Data & Model Information

Assessment of Cognitive Functioning in SHARE

Immediate and delayed recall were assessed using a list of 10 words (Harris & Downson, 1982) read out by the interviewer. For the immediate recall score, respondents were asked to repeat as many words as they could remember right after they were read out to them. For delayed recall, respondents were asked to repeat the same list of 10 words after having responded to other questions assessing cognitive functioning. In the verbal fluency test (Rosen, 1980), respondents were tasked with naming as many animals as possible in one minute. The score for this test was the total number of animals named that were validated by the interviewer. Finally, the numeracy test was a composite score based on four questions which asked individuals to do division and calculate percentages of a total.

Information on the Measurement of Self-rated Health and Depression in SHARE

SRH was treated as continuous scale ranging from 1 (Poor) to 5 (Excellent) and the EURO-D scale ranging from 0 (No depressive symptoms) to 12 (Highly depressed).

Model Fit Indices

The model fit indices for Model 1 without interactions (CFI = 0.916, TIL = 0.903, RMSEA = 0.035, SRMR = 0.069) and Model 2 with interactions (CFI = 0.914, TLI = 0.902, RMSEA = 0.032, SRMR = 0.065) indicated an acceptable fit (Bentler, 1990; Brown, 2015; Hu & Bentler, 1999, Lai & Green, 2016).

R-Square for Latent Variables

Table S1 R-Square for Latent Dependent Variables

	Model 1	Model 2
Intercept	0.534	0.538
Slope	0.159	0.171
Cognitive Functioning Wave 1	0.788	0.788
Cognitive Functioning Wave 2	0.787	0.787
Cognitive Functioning Wave 4	0.802	0.803
Cognitive Functioning Wave 5	0.816	0.816
Cognitive Functioning Wave 6	0.831	0.831

Descriptive Statistics

Means and standard deviations for the indicators of cognitive functioning are shown in Table S2.

Table S2 Means (and standard deviations in parentheses) for cognitive functioning indicators based on raw scores.

	Wave 1	Wave 2	Wave 4	Wave 5	Wave 6
Immediate Recall	4.8 (1.8)	5.0 (1.8)	5.2 (1.9)	5.3 (1.9)	5.3 (1.8)
Delayed Recall	3.3 (2.0)	3.6 (2.0)	3.9 (2.2)	4.0 (2.2)	4.0 (2.2)
Verbal Fluency	18.7 (7.3)	19.0 (7.5)	19.3 (7.7)	20.2 (7.7)	19.9 (7.8)
Numeracy	3.3 (1.2)	3.4 (1.2)	3.3 (1.1)	3.4 (1.1)	3.2 (1.2)

Figure S1 Sample selection flow chart

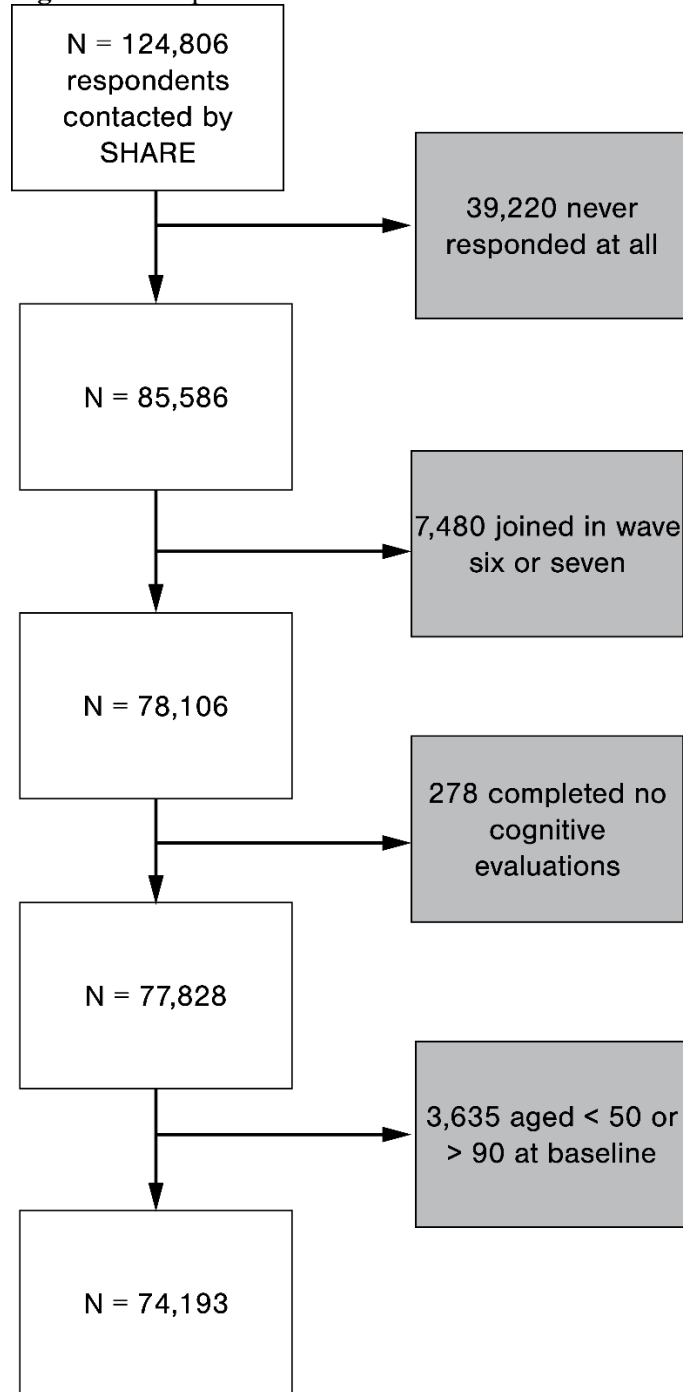
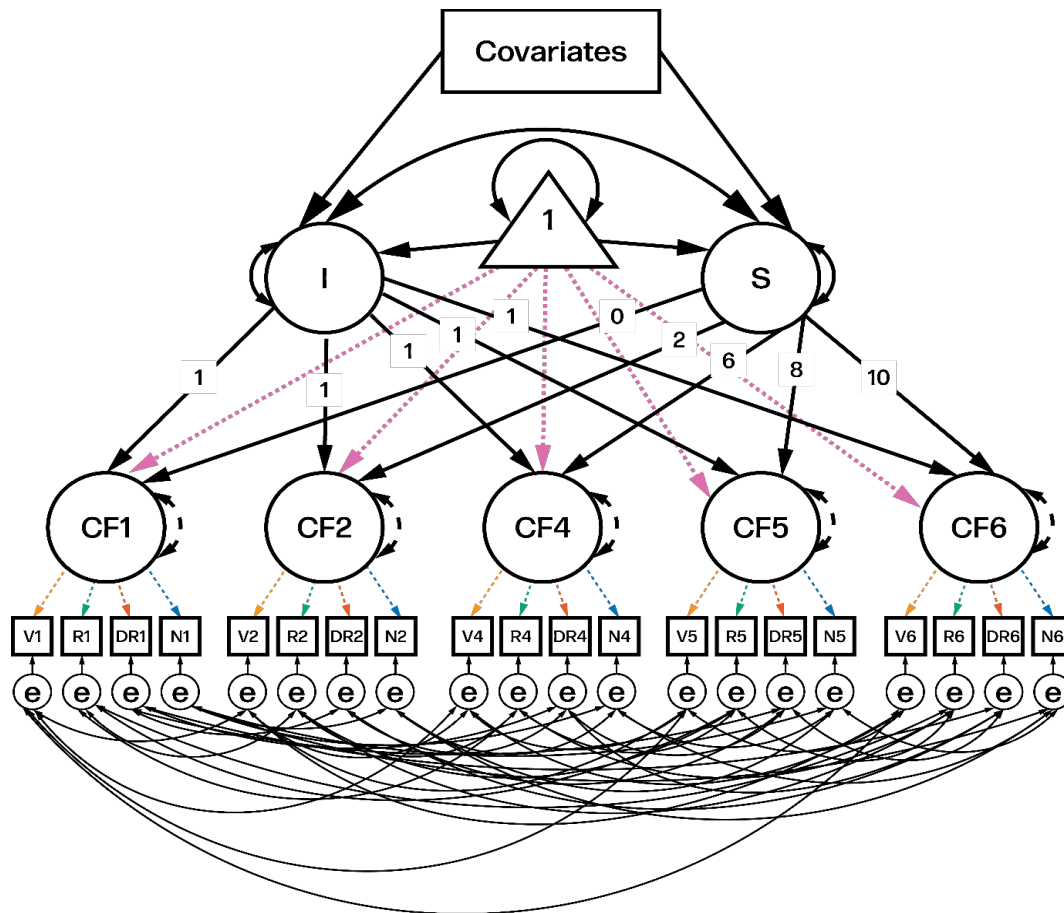


Figure S2 Path Diagram for the Curve-of-Factor Growth Model; dashed arrows of the same colour indicate parameter equality constraints. Covariates' means, variances, and covariances are not shown for simplicity.



References

- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238-246. <https://doi.org/10.1037/0033-2909.107.2.238>
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- Rosen, W. G. (1980). Verbal fluency in aging and dementia. *Journal of Clinical Neuropsychology*, 2(2), 135-146. <https://doi.org/10.1080/01688638008403788>