

Supplementary Tables

Table 1

Cognitive battery and the results of dimensionality reduction with Principal component analysis (PCA) (n = 101)

Task	Construct	Description	Administration	Source	Component			
					1. Vocabulary	2. Fluid intelligence	3. Perceptual speed	4. Memory
Matrix reasoning	Fluid intelligence	Select pattern that best completes the missing cell in a matrix	Computer-based	(Raven, 1962)	–	.755	–	–
Shipley abstract		Determine the letters, words, or numbers that best complete a progressive sequence	Paper-pencil	(Zachary, 1986)	–	.541	–	–
Letter sets		Identify which of five groups of letters is different from the others	Computer-based	(Ekstrom, French, Harman, & Dermen, 1976)	–	.598	–	–

Spatial relations	Spatial reasoning	Determine which three dimensional object could be constructed by folding the two dimensional object	Computer-based	(Bennett, Seashore, & Wesman, 1997)	—	.791	—	—
Paper folding		Determine the pattern of holes that would result from a sequence of folds and a punch through folded paper	Computer-based	(Ekstrom, French, Harman, & Dermen, 1976)	—	.763	—	—
Form boards		Determine shapes needed to fill in a space	Computer-based	(Ekstrom, French, Harman, & Dermen, 1976)	—	.655	—	—
Digit symbol	Perceptual speed	Use a code table to write the correct symbol below each digit	Paper-pencil	(Wechsler, 1997)	—	—	.819	—
Letter & pattern comparison		Same or different comparison of pairs of letter strings/patterns	Paper-pencil	(Salthouse & Babcock, 1991)	— —	— —	.855 .778	—

Logical memory	Episodic memory	Recall as many idea units as possible from three stories	Computer-based/paper-pencil	(Wechsler, 1997)	—	—	—	.583
Free recall		Recall as many words as possible across four word trial lists	Computer-based/ paper-pencil	(Wechsler, 1997)	—	—	—	.784
Paired associates		Recall the second words from word pairs	Computer-based/ paper-pencil	(Salthouse, Fristoe, & Rhee, 1996)	—	—	—	.843
WAIS vocab.	Vocabulary	Define words aloud	Experimenter/ paper-pencil	(Wechsler, 1997)	.843	—	—	—
Picture vocab.		Name the objects presented	Experimenter/ paper-pencil	(Woodcock & Johnson, 1990)	.777	—	—	—
Synonym		Choose the word most similar	Computer-based	(Salthouse, 1993)	.790	—	—	—
antonym		opposite in meaning to the target	Computer-based	(Salthouse, 1993)	.802	—	—	—

Note. In line with previous findings (Salthouse, 2004, 2005, 2010; Salthouse & Ferrer-Caja, 2003) PCA reduced the 16 cognitive tasks to four factors: fluid intelligence, perceptual speed, episodic memory, and vocabulary. Columns 6–9: Standardized component loadings from a 4-factor PCA extraction. For clarity, only loadings above 0.50 are displayed. Rotation method: varimax. Missing values: replace with mean.

Table 2

Occupational experience factors of left hippocampal volume

	Step 1 B	Step 2 B	Step 3 B	Step 4 B
Age	-37.590***	-36.229***	-33.401**	-32.851**
Education	9.208	7.663	3.921	1.504
MVPA	.860	1.716	2.066	.845
ES	-16.889	-20.117	-26.122	-36.333
eICV	.001	.001	.001	.001
Work stimulation		32.816	57.563	45.210
Workload		-85.636	-66.460	21.341
Interpersonal conflicts		151.244	147.630	609.701
Environmental hazards		-12.481	-2.135	-58.237
Physical demands			-92.827*	-347.536
Work stimulation (quadratic term)				13.020
Workload (quadratic term)				-12.655
Interpersonal conflicts (quadratic term)				-139.488
Environmental hazards (quadratic term)				46.858
Physical demands (quadratic term)				1.589
R ²	.237	.286	.322	.368
ΔR^2		.049	.037	.046

* p < .05 (2-tailed). ** p < .01(2-tailed). *** p < .001.

Table 3

Occupational experience factors of right hippocampal volume

	Step 1	Step 2	Step 3	Step 4
	B	B	B	B
Age	-37.784**	-38.658**	-34.831**	-34.518**
Education	3.461	-.309	-5.374	-7.754
MVPA	.758	1.613	2.088	.792
ES	-36.151	-34.823	-42.950	-56.412
eICV	.001	.001	.001	.001
Work stimulation		50.786	84.278	87.050
Workload		-27.963	-2.010	39.811
Interpersonal conflicts		58.658	53.766	724.910
Environmental hazards		-10.594	3.409	-62.789
Physical demands			-125.631*	-349.113
Work stimulation (quadratic term)				34.492
Workload (quadratic term)				-5.856
Interpersonal conflicts (quadratic term)				-203.538
Physical demands (quadratic term)				40.117
Environmental hazards (quadratic term)				1.875
R ²	.185	.210	.262	.314
ΔR ²		.024	.052	.052

* p < .05 (2-tailed). ** p < .01(2-tailed). *** p < .001