Table S1. Categorization of vision and hearing

	Vision	Hearing
Good	Able to read newspapers and watch television	Able to have and follow a conversation in a group of people
Moderate	Able to read texts with large letters and watch television	Able to have a conversation with one person/questions do not have to be repeated
Poor	Not able to read and watch television/vision problems cause some difficulties in ADL	Limited ability to have a conversation with one person/questions need to be repeated several times with a loud voice
Very poor	Limited or complete loss of vision which causes severe difficulties in ADL	Not able to have a conversation with one person; this does not improve when speaking loud and clearly

ADL=Activities of daily living.

Table S2. Measurement properties of the neuropsychological tests

Test	Internal consistency	Test-retest reliability
MMSE	Cronbach's α = .62 to .81[1]	r = .83 to .99[2,3]
RBMT	Cronbach's α = .87 to .91[4]	r = .80 to .89[1,3]
VAT Trial 1+2	Cronbach's α = .88[5]	r = .81[6]
Digit Span	Cronbach's α = .90[7]	r = .66 to .89[3,8]
TMT A & B	n.a.	r = .60 to .90[3]
Letter Fluency	Cronbach's α =.82[9]	r = .70 to .88[3,8]
Animal Fluency	Cronbach's α.= 77[7]	r = .79[8]
BADS Key Search	Cronbach's α = .60[1]*	r = .64 to .71[1,3]
DART	Cronbach's α =.91[10]	r = .81[10]
Clock Drawing	Cronbach's α = .90[11]	r = .39 to .94[8,12]
VOSP Number Location	Cronbach's α = .80 to .89[1,7]	r = .88[1]

r=test-retest reliability correlation coefficient. n.a.=not available. *For the total BADS. MMSE=Mini-Mental State Examination. RBMT=Rivermead Behavioural Memory Test. VAT=Visual Association Test. TMT=Trail Making Test. BADS=Behavioural Assessment of the Dysexecutive Syndrome Test. DART= Dutch version of the National Adult Reading Test. VOSP=Visual Object and Space Perception Battery.

Table S3. Regression coefficients for sex, age, and education

The table below represents the regression coefficients for sex, age, and education. Regression-based normative data can be obtained from the regression coefficients by calculating standardized z-scores, using formulas of regression (Table S4). First, a predicted score based on sex, age, and education can be computed as follows: $y\sim\beta_0+Sex(female)*\beta_1+Age*\beta_2+Education*\beta_3$. The difference between the predicted score and the observed score results in a residual score *(e),* which can be computed into standardized residual (z-score) using the Standard Error of the Estimate *(SD(e))*: $Z=e/SD(e)$ [13]. The z-score represents the number of standard deviations the obtained score deviates from the expected score. In addition, in the attached excel file the observed scores on the cognitive tests can be imported of which the z-scores are calculated automatically.

Test	*B* (Sex)	*B* (Age)	*B* (Education)	Intercept	*SD(e)*
MMSE	-0.60211	-0.282791213	0.505103791	53.21103	3.016
RBMT Immediate Recall	-0.63678	-0.104713469	0.612759249	18.02674	4.558
RBMT Delayed Recall	-0.70255	-0.102838417	0.451041123	14.83272	4.363
Key Search	-1.70949	-0.044886954	0.752795169	10.43155	3.338
Letter Fluency	3.741579	-0.010157815	2.658901981	15.29493	9.611
Animal Fluency 1 min	1.239838	-0.172348155	0.535242321	26.42796	4.139
Animal Fluency 2 min	1.724357	-0.259350555	0.942601692	39.5249	6.481
Digit Span Forward *score*	-0.58947	0.093607915	0.414156417	-3.06967	1.661
Digit Span Forward *span*	-0.14698	0.033269079	0.227584613	1.163012	1.002
Digit Span Backward *score*	0.195736	0.010612323	0.22764657	2.796924	1.395
Digit Span Backward *span*	0.121287	-0.041349559	0.123681852	7.524261	0.894
TMT A *time*	0.04509	-0.099396142	0.047727321	5.25199	0.463
TMT B *time*	0.225416	-0.046358495	0.061437269	-1.28086	0.499

Values are presented as unstandardized Beta (*B*). SD(e)=Standard Error of the Estimate. MMSE=Mini-Mental State Examination. RBMT=Rivermead Behavioural Memory Test. TMT=Trail Making Test. TMT scores were log-transformed.

Table S4. Regression formulas to calculate regression-based norms

Z_{MMSE}= (*observed score* - (sex(female) *-0.602+ age *-0.283+ education *0.505+53.211)) / 3.016

$Z_{RBMT\ Immediate\ Recall}$= (*observed score* - (sex(female) *-0.637+ age *-0.105+ education *0.613+18.027)) / 4.558

$Z_{RBMT\ Delayed\ Recall}$= (*observed score* - (sex(female) *-0.703+ age *-0.103+ education *0.451+14.833)) / 4.363

$Z_{Key\ Search}$= (*observed score* - (sex(female) *-1.709+ age *-0.045+ education *0.753+10.432)) / 3.338

$Z_{Letter\ Fluency}$= (*observed score* - (sex(female) *3.742+ age *-0.01+ education *2.659+15.295)) / 9.611

$Z_{Animal\ Fluency\ 1min}$= (*observed score* - (sex(female) *1.24+ age *-0.172+ education *0.535+26.428)) / 4.139

$Z_{Animal\ Fluency\ 2min}$= (*observed score* - (sex(female) *1.724+ age *-0.259+ education *0.943+39.525)) / 6.481

$Z_{Digit\ Span\ Forward\ score}$= (*observed score* - (sex(female) *-0.589+ age *0.094+ education *0.414+-3.07)) / 1.661

$Z_{Digit\ Span\ Forward\ span}$= (*observed score* - (sex(female) *-0.147+ age *0.033+ education *0.228+1.163)) / 1.002

$Z_{Digit\ Span\ Backward\ score}$= (*observed score* - (sex(female) *0.196+ age *0.011+ education *0.228+2.797)) / 1.395

$Z_{Digit\ Span\ Backward\ span}$= (*observed score* - (sex(female) *0.121+ age *-0.041+ education *0.124+7.524)) / 0.894

$Z_{TMT\ A}$= (-1*LN(*observed score*) - (sex(female) *0.045+ age *-0.099+ education *0.048+5.252)) / 0.463

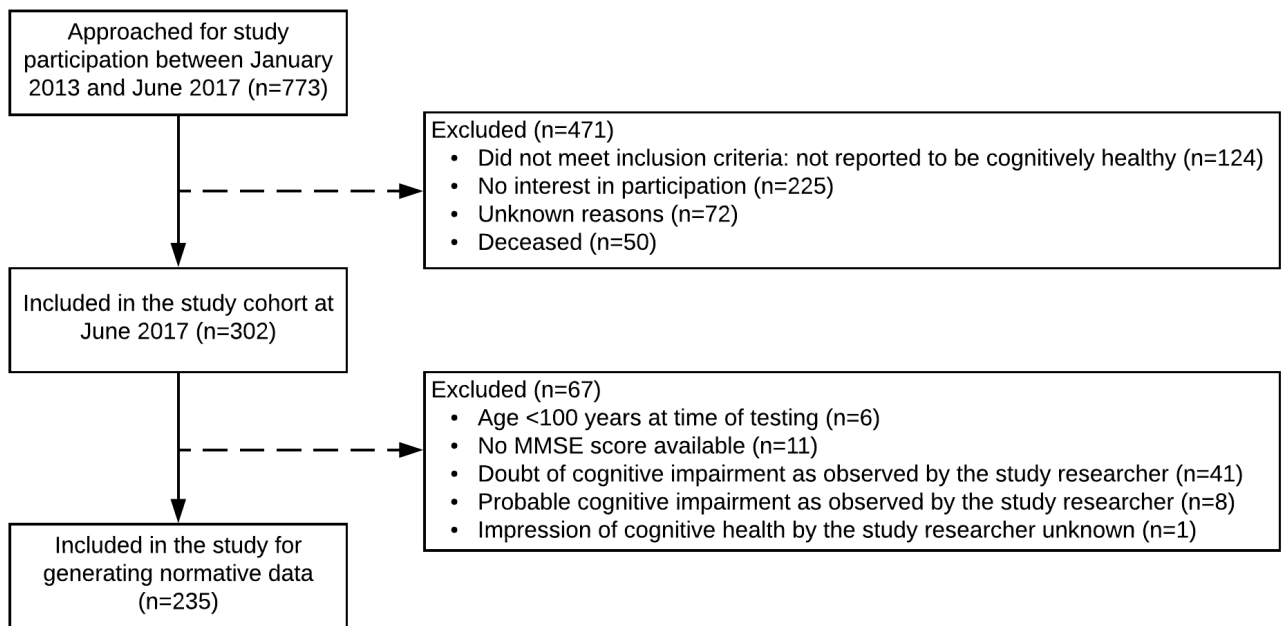$Z_{TMT\ B}$= (-1*LN(*observed score*) - (sex(female) *0.225+ age *-0.046+ education *0.061+-1.281)) / 0.499

MMSE=Mini-Mental State Examination. RBMT=Rivermead Behavioural Memory Test. TMT scores were log-transformed.

Table S5. Pearson correlations among cognitive test scores

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. MMSE	1																	
2. RBMT Immediate Recall	.49**	1																
3. RBMT Delayed Recall	.49**	.89**	1															
4. Number Location	.43**	.36**	.29**	1														
5. Key Search	.17	.29**	.23*	.15	1													
6. CDT	.47**	.39**	.38**	.20*	.18*	1												
7. Letter Fluency	.45**	.35**	.30**	.37**	.19*	.37**	1											
8. Animal Fluency 1 min	.40**	.44**	.48**	.21*	.07	.30**	.51**	1										
9. Animal Fluency 2 min	.34**	.49**	.50**	.20*	.15	.27**	.55**	.90**	1									
10. VAT Memory	.53**	.47**	.48**	.28**	.16	.32**	.22**	.34**	.31**	1								
11. VAT Naming	.35**	.19*	.19*	.19*	-.02	.19*	.24**	.17	.18*	.40**	1							
12. Digit Span fw score	.43**	.22**	.18*	.18	.14	.23*	.35**	.23**	.27**	.13	.23*	1						
13. Digit Span fw span	.38**	.26**	.21**	.12	.12	.23*	.39**	.22**	.26**	.08	.23*	.90**	1					
14. Digit Span bw score	.39**	.35**	.33**	.21*	.05	.35**	.32**	.23**	.30**	.17	.17	.43**	.41**	1				
15. Digit Span bw span	.33**	.30**	.28**	.21*	.05	.23*	.30**	.19*	.27**	.14	.25*	.35**	.43**	.80**	1			
16. TMT A	.49**	.22*	.23*	.16	.01	.33**	.40**	.34**	.27**	.36**	.32**	.25**	.22*	.15	.17	1		
17. TMT B	.51**	.28**	.24*	.26*	-.05	.39**	.30**	.37**	.33**	.25*	.37**	.22*	.18	.25*	.19	.58**	1	
18. DART IQ score	.39**	.23**	.23**	.25**	.25**	.32**	.43**	.22**	.23**	.24**	.42**	.40**	.38**	.31**	.28**	.25**	.28**	1

**Correlation is significant at the 0.01 level (2-tailed), *Correlation is significant at the 0.05 level (2-tailed). MMSE=Mini-Mental State Examination. RBMT=Rivermead Behavioural Memory Test. VAT=Visual Association Test. FW=Forward. BW=Backward. TMT=Trail Making Test. DART=Dutch Adult Reading Test.

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┌─────────────────────────┐
│  Approached for study   │
│ participation between   │
│  January 2013 and June  │
│    2017 (n=773)         │
└─────────────────────────┘
            ┆        ┌──────────────────────────────────────────────────────────────────────┐
            ┆ ─ ─ ─ ▶│ Excluded (n=471)                                                     │
            ┆        │   • Did not meet inclusion criteria: not reported to be cognitively   │
            ▼        │     healthy (n=124)                                                  │
┌─────────────────────────┐   • No interest in participation (n=225)                       │
│ Included in the study   │   • Unknown reasons (n=72)                                      │
│  cohort at June 2017    │   • Deceased (n=50)                                            │
│      (n=302)            │                                                                │
└─────────────────────────┘
            ┆        ┌──────────────────────────────────────────────────────────────────────┐
            ┆ ─ ─ ─ ▶│ Excluded (n=67)                                                      │
            ┆        │   • Age <100 years at time of testing (n=6)                          │
            ▼        │   • No MMSE score available (n=11)                                   │
┌─────────────────────────┐   • Doubt of cognitive impairment as observed by the study     │
│ Included in the study   │     researcher (n=41)                                          │
│ for generating          │   • Probable cognitive impairment as observed by the study     │
│ normative data          │     researcher (n=8)                                           │
│      (n=235)            │   • Impression of cognitive health by the study researcher      │
└─────────────────────────┘     unknown (n=1)                                              │
```

Figure S1. Flowchart of study inclusion. Number of centenarians approached for study participation and number of in- and excluded participants based on the different in- and exclusion criteria.
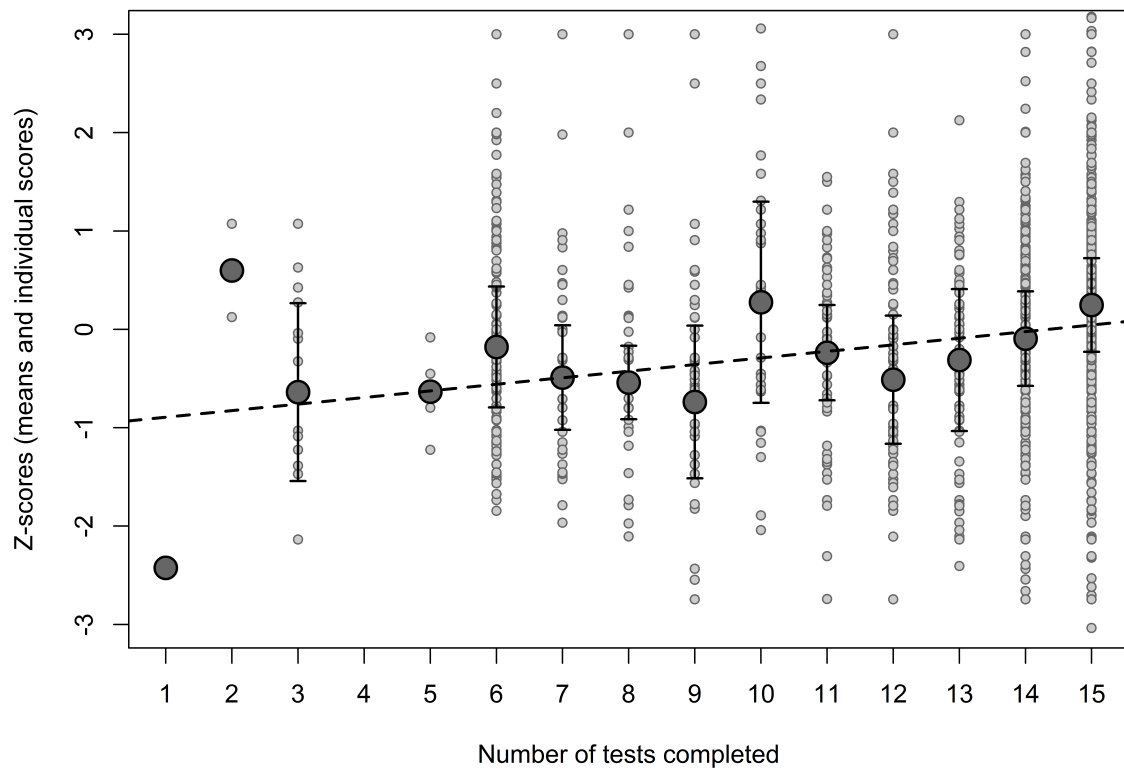
Figure S2. Associations between the number of completed tests and overall cognitive test performance. The 180 subjects who were offered all 15 tests were divided in groups based on the number of tests completed. The number of subjects per group were respectively: 1, 1, 5, 0, 1, 38, 6, 5, 6, 4, 7, 7, 7, 26, 65. Light grey dots: individual z-scores of the tests that could be completed. Dark grey dots/error bars: average z-scores and standard deviations across all subjects. We correlated the average z-scores with the number of tests that the subjects could complete using Pearson's correlation (r=.35, p<.001).

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