**Deviations from the Pre-Registration**

In the preregistration, we stated that 3,756 articles were screened for eligibility. Ultimately, however, 4,077 articles and chapters were screened, because search strategy 2 (PsycINFO search for books) was added during the revision process. This also explains the different number of excluded articles.

In the preregistration, we stated that we would control for the test-retest interval (and its nonlinear form, if necessary) in the analyses of H2. However, we decided to test H2 in three subsequent steps. In step 1, we only investigated the age effects without controlling for the test-retest interval effects. In step 2, age and test-retest interval effects were included simultaneously as registered. In step 3, the interaction of age and test-retest interval effects was also added. We deviated from preregistration to avoid convergence issues in the initial determination of the age effect in the first step. In steps 2 and 3, the test-retest interval was included in the analyses as preregistered.

Based on reviewer feedback, we added an analysis of a subset of stability effect sizes that were adjusted for their test reliabilities. This analysis was not preregistered and investigated differences in average stability and the age, test-retest-interval, and ability moderator analyses (H1-4) to the main dataset as an open research question. In the preregistration, we stated that studies reporting latent correlations would be included in the meta-analysis. However, as latent factors are measurement error-free, we decided it was more appropriate to include these studies in this exploratory analysis.

**Test-Retest Interval and Age Interaction in Children and Adolescents**

The analyses from H1 and H2 were repeated based on the subsample comprised of preschool children, school-aged children and adolescents to test possible interaction effects of test-retest interval and age in this subpopulation. This was done to replicate the analyses conducted by Tucker-Drob and Briley (2014). Model fit indices for models testing linear, quadratic, and exponential test-retest interval and age effects and possible interaction effects are reported in Table S7. As in the complete dataset, the exponential functions reached the best model fits in for both moderators. However, in contrast to the complete dataset, the additional inclusion of the test-retest interval and age interaction did not lead to an improvement in model fit.

**Results Based on Latent Correlations**

Model fit indices for models testing linear, quadratic, and exponential test-retest interval and age effects and possible interaction effects based on latent correlations are reported in Table S8. Linear test-retest interval and age effects indicated the best fit. Step 2 and step 3 analyses indicated that the additional inclusion of the test-retest interval and age interaction did not lead to an improvement in model fit. The model parameters of the best fitting models are reported in Table S9. Note that the dataset based on latent correlations was too small for a meaningful interpretation of the parameters (i.e., *df* < 4).

The magnitude of rank order stability was *ρ* =.81 (*df* = 4.98, *p* < .001, CL [.68, .95]) when not controlling for test-retest interval and age(-20). Unfortunately, the dataset of latent correlations was too small to control for test-retest intervaland age(-20). However, when residualizing out the effects of test-retest intervaland ageeffects based on the results of the manifest correlations, a rank order stability of *ρ* = .85 (*df* = 4.93, *p* < .001, CL [.743, .951]) was observed for an expected test-retest intervalof five years and a sample ageof 20 years. Analyses testing H4 to H10 were not calculated because there were too few samples (i.e., *h* samples < 4).

**Table S1**

*Information on Samples Providing Rank-Order Stability Effect Sizes Based on Manifest Values.*

| Sample Id | Source | *e* Effect Sizes | *r* | *n* | Mean Age in years | Test-Retest Intervals in years | Ability | Sample IQ | Test Family | Varying measurement intervals | Complete Test | Location | Reliability |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1937 Stanford Binet Standardization | Bradway & Thompson, 1962 | 5 | .59 - .85 | 109 | 4.00 - 13.60 | 9.60 - 25.50 | G | 112.30 - 112.80 | mixed; Stanford Binet | different; same | complete | US |  |
| ADEPT | Raykov, 2000 | 4 | .70 - .87 | 161 | 72.00 | 0.50 | Gf |  | ADEPT; CFT; PMA | same | complete; not complete | US |  |
| Aberdeen Birth Cohort 1921 | Deary, Whiteman et al., 2004; Whalley et al., 2004 | 2 | .63 - .65 | 74 - 144 | 11.00 | 53.00 - 66.00 | G |  | MHT; mixed | different; same | complete; not complete | UK |  |
| Aberdeen Birth Cohort 1936 | Sandu et al., 2014 | 4 | .45 - .84 | 87 | 11.00 - 68.60 | 5.00 - 62.00 | G; Gf |  | mixed; Raven | different; same | complete; not complete | UK |  |
| Adkins, 1937 | Adkins, 1937 | 7 | .65 - .81 | 77 | 13.00 - 15.00 | 1.00 | G |  | Kuhlmann; Morgan mental; Otis | same | complete | US |  |
| Allan & Young, 1943 | Allan & Young, 1943 | 2 | .32 - .41 | 49 - 51 | 3.75 - 4.00 | 5.25 - 5.67 | G | 113.00 - 120.00 | mixed | different | complete | US |  |
| Allen, 1945 | Allen, 1945 | 1 | .69 | 327 | 7.00 | 2.67 | G |  | Kuhlmann | same | complete | US |  |
| Almas et al., 2016 | Almas et al., 2016 | 10 | .59 - .82 | 45 - 57 | 2.50 - 8.00 | 1.00 - 9.50 | G | 100.26 - 109.33 | Bayley; mixed; Wechsler | different; same; same\_family | complete | US | .88 - .96 |
| Arthur et al., 2010 | Arthur et al., 2010 | 1 | .84 | 296 | 35.53 | 1.18 | G |  | mixed | same | complete | US |  |
| Bartoi et al., 2015 | Bartoi et al., 2015 | 5 | .62 - .91 | 21 | 11.24 | 1.84 | G; Gc; Gf; Gs; Gwm | 91.62 | Wechsler | same | complete | US | .86 - .97 |
| Basso et al., 2002 | Basso et al., 2002 | 7 | .80 - .90 | 51 | 23.80 | 0.38 | G; Gc; Gs; Gv; Gwm | 109.40 | Wechsler | same | complete | US | .86 - .98 |
| Baudson & Preckel, 2013a | Baudson & Preckel, 2013 | 1 | .73 | 51 | 7.00 | 1.00 | Gf |  | THINK | same | complete | Germany | .73 |
| Baudson & Preckel, 2013b | Baudson & Preckel, 2013 | 1 | .70 | 66 | 8.00 | 1.00 | Gf |  | THINK | same | complete | Germany | .80 |
| Baudson & Preckel, 2013c | Baudson & Preckel, 2013 | 1 | .61 | 64 | 9.00 | 1.00 | Gf |  | THINK | same | complete | Germany | .76 |
| Bauer & Smith, 1988 | Bauer & Smith, 1988 | 6 | -.25 - .85 | 14 - 28 | 4.92 | 1.00 | Gc; Gf; Gv; Gwm |  | Kaufmann; Stanford Binet | same | complete | US |  |
| Bauer & Smith, 1988a | Bauer & Smith, 1988 | 1 | .93 | 14 | 4.92 | 1.00 | G | 109.50 | Kaufmann | same | complete | US | .94 |
| Bauer & Smith, 1988b | Bauer & Smith, 1988 | 1 | .20 | 14 | 4.92 | 1.00 | G | 107.29 | Stanford Binet | same | complete | US |  |
| Bavarian Longitudinal Study | Breeman et al., 2015 | 10 | .26 - .77 | 197 - 229 | 1.67 - 8.00 | 2.00 - 24.33 | G | 101.80 - 106.90 | mixed | different | complete | Germany | .87 - .97 |
| Bergold & Steinmayr, 2016 | Bergold & Steinmayr, 2016 | 1 | .63 | 148 | 6.67 | 0.75 | Gf |  | CFT | same | complete | Germany | .82 |
| Berlin Aging Study | Ghisletta & Lindenberger, 2003 | 6 | .68 - .79 | 132 - 206 | 84.50 - 88.37 | 2.04 - 5.90 | Gc; Gs |  | mixed | same | not complete | Germany |  |
| Betula project | Gorbach et al., 2017 | 9 | .61 - .84 | 152 - 262 | 56.30 - 66.30 | 5.00 - 15.00 | Gl; Gs |  | mixed | same | not complete | Sweden | .77 - .80 |
| Bonn Longitudinal Study of Aging | Rudinger & Rietz, 1994 | 6 | .56 - .66 | 121 - 184 | 70.00 - 74.00 | 2.00 | G |  | Raven, WAIS & HAWE | different | complete | Germany |  |
| Bonney, 1943a | Bonney, 1943 | 1 | .76 | 48 | 9.00 | 1.00 | G |  | mixed | different | complete | US |  |
| Bonney, 1943b | Bonney, 1943 | 1 | .93 | 17 | 10.00 | 1.00 | G |  | Kuhlmann | same | complete | US |  |
| Bonney, 1943c | Bonney, 1943 | 1 | .71 | 17 | 10.00 | 1.00 | G |  | Kuhlmann | same | complete | US |  |
| Bonney, 1943d | Bonney, 1943 | 1 | .78 | 12 | 10.00 | 1.00 | G |  | Kuhlmann | same | complete | US |  |
| Bradshaw, 1964 | Bradshaw, 1964 | 3 | .50 - .66 | 58 | 10.00 | 2.00 | G; Gc; Gf | 111.36 | California Test of Mental Maturity | same; same\_family | complete | US |  |
| Bradway-McArdle Longitudinal Project (McArdle & Hamagami, 1996) | McArdle & Wang, 2008 | 30 | -.05 - .91 | 49 - 110 | 3.90 - 57.12 | 8.00 - 61.00 | Gc; Gf |  | SB; SB & WAIS; WAIS & WJ-R | different; same test; same\_family | complete | US |  |
| BrainSCALE cohort | Koenis et al., 2015; Koenis et al., 2018 | 4 | .70 - .78 | 162 - 259 | 9.90 - 12.92 | 2.93 - 7.95 | G | 101.70 - 103.00 | Wechsler | same; same\_family | not complete | Netherlands |  |
| Bryant & Roffe, 1978 | Bryant & Roffe, 1978 | 5 | .71 - .85 | 38 | 6.00 | 0.07 | G; Gc; Gl; Gq; Gv |  | McCarthy Scales | same | not complete | US |  |
| Bryant et al., 1990 | Bryant et al., 1990 | 1 | .71 | 64 | 3.33 | 3.00 | G |  | Wechsler | same family | complete | Germany |  |
| Bub et al., 2011 | Bub et al., 2011 | 6 | .60 - .80 | 194 - 214 | 8.23 - 9.31 | 0.94 - 2.02 | Gc; Gs |  | Woodcock-Johnson | same | not complete | US | .85 - .89 |
| Capwell, 1945 | Capwell, 1945 | 1 | .88 | 85 | 15.00 | 0.67 | G | 101.88 | Kuhlmann | same | complete | US |  |
| Carioti et al., 2019 | Carioti et al., 2019 | 1 | .86 | 128 | 12.00 | 1.00 | G |  | Wechsler | same | complete | Italy | .96 |
| Catron & Thompson, 1979 | Catron & Thompson, 1979 | 8 | .72 - .91 | 19 | 18.00 | 0.02 - 0.33 | Gc; Gv |  | Wechsler | same | complete | US |  |
| Catron & Thompson, 1979a | Catron & Thompson, 1979 | 1 | .94 | 19 | 18.00 | 0.02 | G | 117.84 | Wechsler | same | complete | US |  |
| Catron & Thompson, 1979b | Catron & Thompson, 1979 | 1 | .83 | 19 | 18.00 | 0.08 | G | 118.00 | Wechsler | same | complete | US |  |
| Catron & Thompson, 1979c | Catron & Thompson, 1979 | 1 | .74 | 19 | 18.00 | 0.17 | G | 118.95 | Wechsler | same | complete | US |  |
| Catron & Thompson, 1979d | Catron & Thompson, 1979 | 1 | .90 | 19 | 18.00 | 0.33 | G | 118.95 | Wechsler | same | complete | US |  |
| Colom et al., 2012 | Colom et al., 2012 | 2 | .45 - .74 | 10 | 18.95 | 0.12 | G; Gf |  | mixed; Raven | same | complete | Spain |  |
| Colom et al., 2013 | Colom et al., 2013 | 3 | .48 - .84 | 28 | 18.20 | 0.25 | Gc; Gf; Gwm |  | mixed | same | not complete | Spain |  |
| Colorado Adoption Project | Cardon & Fulker, 1994; Petrill et al., 2004 | 80 | .06 - .80 | 369 - 691 | 1.00 - 12.00 | 1.00 - 15.00 | G; Gc; Gs; Gv; Gwm | 106.08 - 113.01 | Bayley; mixed; Stanford Binet; Wechsler | different; same; same\_family | complete; not complete | US |  |
| Committee of Socialization and Social Structure of the Social Science Research Counsil - 1962a | Rees & Palmer, 1970 | 3 | .76 - .79 | 45 - 243 | 6.00 - 12.00 | 5.00 - 11.00 | G | 117.16 - 117.98 | Stanford Binet | same\_family | complete | US | .94 |
| Committee of Socialization and Social Structure of the Social Science Research Counsil - 1962b | Rees & Palmer, 1970 | 3 | .76 - .83 | 45 - 233 | 6.00 - 12.00 | 5.00 - 11.00 | G | 114.33 - 119.09 | Stanford Binet | same\_family | complete | US | .94 |
| Crano et al., 1972 | Crano et al., 1972; Schmidt & Crano, 1974 | 5 | .67 - .83 | 1501 - 5495 | 10.00 | 2.00 | G; Gc; Gf | 98.90 | Lorge-Thorndike | same\_family | complete | US |  |
| Croake, Keller & Catlin, 1973a | Croake, Keller & Catlin, 1973 | 1 | .96 | 11 | 4.25 | 1.00 | G | 98.00 | Wechsler | same | complete | US |  |
| Croake, Keller & Catlin, 1973b | Croake, Keller & Catlin, 1973 | 1 | .75 | 11 | 4.75 | 1.00 | G | 92.00 | Wechsler | same | complete | US |  |
| Crockett et al., 1975 | Crockett et al., 1975 | 6 | .41 - .61 | 42 | 5.59 | 3.79 | G; Gc; Gv | 87.46 - 91.91 | mixed; Wechsler | different; same; same\_family | complete | US |  |
| Cross‐cultural Longitudinal Analysis of Student Success | Tikhomirova et al., 2019 | 12 | .25 - .60 | 121 - 295 | 7.46 - 9.46 | 1.00 - 3.00 | Gf |  | Raven | same | not complete | Kyrgyzstan; Russia | .90 |
| Danish Twin Registry | Starnawska et al., 2017 | 1 | .67 | 480 | 56.00 | 11.00 | G |  | mixed | same | not complete | Denmark |  |
| Deary, 1995 | Deary, 1995 | 1 | .64 | 108 | 11.75 | 2.00 | Gf |  | Raven | same | complete | UK |  |
| Demetriou et al., 2013a | Demetriou et al., 2013 | 9 | .61 - .78 | 113 | 5.74 - 7.74 | 1.00 - 2.00 | Gf; Gs; Gwm |  | mixed | same | complete | Cyprus | .84 - .96 |
| Demetriou et al., 2013b | Demetriou et al., 2013 | 3 | .33 - .71 | 395 | 9.32 | 1.00 | Gf; Gs; Gwm |  | mixed | same | complete | Cyprus | .84 - .96 |
| Dudek et al., 1969 | Dudek et al., 1969 | 3 | .71 - .85 | 100 | 6.50 - 7.50 | 1.00 - 2.00 | G | 106.00 - 108.00 | Wechsler | same | complete | Canada |  |
| Dunkel et al., 2018 | Dunkel et al., 2018 | 2 | .71 - .80 | 117 | 11.00 | 7.00 | Gc; Gv |  | Wechsler | same\_family | not complete | US |  |
| Ellzey & Karnes, 1990 | Ellzey & Karnes, 1990 | 3 | .33 - .57 | 46 | 7.68 | 1.54 | G; Gc; Gv | 127.93 - 134.17 | Wechsler | same | complete | US |  |
| Estrada et al., 2015 | Estrada et al., 2015 | 1 | .51 | 193 | 20.13 | 0.08 | Gf |  | Raven | same | complete | US |  |
| Frischkorn et al., 2014 | Frischkorn et al., 2014 | 1 | .57 | 277 | 13.62 | 1.00 | Gf |  | mixed | different | complete | Germany | .80 |
| Fullerton Longitudinal Study | Gottfried et al., 2011; McCoach et al., 2017 | 69 | .15 - .85 | 104 - 128 | 1.00 - 15.00 | 0.50 - 16.00 | G | 108.00 - 116.40 | Bayley; McCarthy Scales; mixed; Wechsler | different; same; same\_family | complete | US |  |
| Gathercole et al., 1992 | Gathercole et al., 1992 | 6 | .20 - .64 | 80 | 4.58 - 6.58 | 1.00 - 3.00 | Gf |  | Raven | same | complete | UK | .69 - .90 |
| Ghisletta et al., 2019 | Ghisletta et al., 2019 | 6 | .69 - .86 | 92 | 52.20 - 56.46 | 2.21 - 4.70 | Gc; Gf |  | CFT; ETS | same | complete | US | .74 |
| Gjerde et al., 1985 | Gjerde et al., 1985 | 2 | .60 - .62 | 26 - 27 | 4.00 | 7.00 | G | 119.43 - 120.27 | Wechsler | same\_family | complete | US |  |
| Glostrup 1914 Cohort | Gow et al., 2012 | 6 | .78 - .90 | 505 - 734 | 50.00 - 70.00 | 10.00 - 30.00 | G |  | Wechsler | same | complete; not complete | Denmark |  |
| Gold Study (Gottschalk, 1939) | Weinert & Hany, 2000 | 3 | .79 - .88 | 86 | 40.70 | 25.00 | G; Gf; Gv |  | Wechsler | same | complete | Germany |  |
| Gold et al., 1995 | Gold et al., 1995 | 2 | .52 - .78 | 316 | 24.75 | 40.00 | Gc; Gv |  | Examination M | same | complete | Canada |  |
| Green et al., 2017 | Green et al., 2017 | 3 | .71 - .87 | 69 | 10.17 - 11.58 | 1.49 - 3.27 | Gf |  | mixed | same | not complete | US |  |
| Gregory et al., 2009 | Gregory et al., 2009 | 1 | .70 | 121 | 77.60 | 1.50 | Gf |  | Raven | same | not complete | Australia |  |
| Grover & Hertzog, 1991 | Grover & Hertzog, 1991 | 6 | .79 - .94 | 420 | 62.32 | 2.00 | Gc; Gf; Gq; Gs; Gv |  | mixed | same | not complete | US |  |
| Heim & Wallace, 1949 | Heim & Wallace, 1949 | 28 | .80 - .98 | 9 | 35.00 - 35.12 | 0.02 - 0.15 | G |  | Alice Heim | same | complete | UK |  |
| Helder et al., 2016 | Helder et al., 2016 | 3 | .75 - .89 | 19 - 21 | 8.93 - 9.89 | 0.96 - 1.97 | G | 79.76 - 81.90 | Wechsler | same | complete | US | .96 - .97 |
| Helsinki Birth Cohort Study | Rantalainen et al., 2016 | 4 | .62 - .78 | 328 | 20.10 | 47.40 | G; Gq; Grw; Gv |  | Finnish Defence Forces Basic Intellectual Ability Test | same | complete | Finland |  |
| Henmon & Burns, 1923 | Henmon & Burns, 1923 | 1 | .91 | 59 | 10.00 | 2.00 | G |  | Stanford Binet | same | complete | US |  |
| Hertzig et al., 1971a | Hertzig et al., 1971 | 1 | .71 | 57 | 3.00 | 3.00 | G | 95.62 | Stanford Binet | same | complete | US |  |
| Hertzig et al., 1971b | Hertzig et al., 1971 | 1 | .66 | 110 | 3.00 | 3.00 | G | 122.47 | Stanford Binet | same | complete | US |  |
| Hindley& Owen, 1978 | Hindley& Owen, 1978 | 21 | .18 - .89 | 84 - 192 | 1.50 - 14.00 | 1.50 - 15.50 | G |  | Alice Heim; mixed; Stanford Binet | different; same | complete | UK | .85 - .90 |
| Hoekstra et al., 2007 | Hoekstra et al., 2007 | 20 | .47 - .80 | 115 - 192 | 5.30 - 12.00 | 1.50 - 12.90 | Gc; Gv |  | mixed; RAKIT; Wechsler | different; same | complete | Netherlands |  |
| Hopkins & Bibelheimer, 1971 | Hopkins & Bibelheimer, 1971 | 6 | .65 - .79 | 354 | 8.53 - 12.50 | 1.00 - 5.00 | G | 97.70 - 104.40 | CTMM | same | complete | US |  |
| Hopp et al., 1997 | Hopp et al., 1997 | 6 | .84 - .90 | 44 | 81.39 | 1.00 - 2.17 | Gc; Gv |  | Wechsler | same | not complete | Sweden | .76 - .83 |
| Hülür et al., 2018 | Hülür et al., 2018 | 2 | .74 - .79 | 112 | 14.70 | 2.00 | Gc; Gf |  | BEFKI | same | complete | Germany | .82 - .86 |
| Interdisciplinary Study on Adult Development | Hülür et al., 2020 | 9 | .73 - .85 | 210 - 268 | 44.00 - 56.00 | 9.00 - 21.00 | Gc; Gf; Gs |  | mixed; Wechsler | same | not complete | Germany |  |
| Irwin, 1966 | Irwin, 1966 | 6 | .83 - .98 | 29 | 5.92 - 10.83 | 0.08 - 0.10 | G; Gc; Gv |  | Wechsler | same | complete | US |  |
| Jankowska et al., 2014 | Jankowska et al., 2014 | 9 | -.51 - .58 | 30 | 8.00 - 10.80 | 2.80 - 5.60 | G; Gc; Gv | 77.83 - 79.48 | Wechsler | same | complete | Poland |  |
| Jintan Child Study | Taji et al., 2019 | 3 | .42 - .56 | 675 | 6.00 | 6.00 | G; Gc; Gv | 104.18 | Wechsler | same\_family | complete | China |  |
| Kangas & Bradway, 1971 | Kangas & Bradway, 1971 | 14 | .39 - .85 | 48 | 3.75 - 32.92 | 10.00 - 38.00 | G; Gc; Gv | 109.60 - 124.10 | mixed; Stanford Binet; Wechsler | different; same; same\_family | complete | US |  |
| Kieng et al., 2017 | Kieng et al., 2017 | 6 | .60 - .80 | 277 | 8.83 | 1.73 | G; Gc; Gf; Gs; Gv; Gwm | 100.80 | Wechsler | same | complete | Switzerland | .96 |
| Klonoff, 1972a | Klonoff, 1972 | 3 | .72 - .76 | 27 | 5.00 - 6.00 | 1.00 - 2.00 | G | 109.70 - 115.10 | Wechsler | same | complete | Canada |  |
| Klonoff, 1972b | Klonoff, 1972 | 3 | .73 - .77 | 13 | 6.00 - 7.00 | 1.00 - 2.00 | G | 111.20 - 116.30 | Wechsler | same | complete | Canada |  |
| Klonoff, 1972c | Klonoff, 1972 | 3 | .74 - .79 | 23 | 7.00 - 8.00 | 1.00 - 2.00 | G | 114.70 - 115.60 | Wechsler | same | complete | Canada |  |
| Klonoff, 1972d | Klonoff, 1972 | 3 | .76 - .82 | 27 | 8.00 - 9.00 | 1.00 - 2.00 | G | 113.70 - 115.90 | Wechsler | same | complete | Canada |  |
| Klonoff, 1972e | Klonoff, 1972 | 3 | .75 - .84 | 16 | 9.00 - 10.00 | 1.00 - 2.00 | G | 117.70 - 118.90 | Wechsler | same | complete | Canada |  |
| Klonoff, 1972f | Klonoff, 1972 | 3 | .74 - .84 | 22 | 10.00 - 11.00 | 1.00 - 2.00 | G | 112.80 - 113.70 | Wechsler | same | complete | Canada |  |
| Klonoff, 1972g | Klonoff, 1972 | 3 | .77 - .85 | 17 | 11.00 - 12.00 | 1.00 - 2.00 | G | 112.10 - 115.10 | Wechsler | same | complete | Canada |  |
| Klonoff, 1972h | Klonoff, 1972 | 3 | .78 - .89 | 17 | 12.00 - 13.00 | 1.00 - 2.00 | G | 115.80 - 117.50 | Wechsler | same | complete | Canada |  |
| Klonoff, 1972i | Klonoff, 1972 | 3 | .87 - .92 | 11 | 13.00 - 14.00 | 1.00 - 2.00 | G | 114.70 - 117.50 | Wechsler | same | complete | Canada |  |
| Kogan & Pankove, 1972a | Kogan & Pankove, 1972 | 1 | .75 | 54 | 10.50 | 5.00 | G |  | mixed | different | complete | US |  |
| Kogan & Pankove, 1972b | Kogan & Pankove, 1972 | 1 | .73 | 47 | 10.50 | 5.00 | G |  | mixed | different | complete | US |  |
| LOGIC Study | Schneider et al., 2009 | 42 | .26 - .81 | 152 - 205 | 4.00 - 18.00 | 1.00 - 19.00 | Gf; Gv |  | CFT; CMMS; Wechsler | different; same family; same test | complete | Germany |  |
| Lassiter & Matthews, 1999 | Lassiter & Matthews, 1999 | 1 | .62 | 52 | 23.00 | 0.10 | G | 106.50 | general Ability Measure for Adults | same | complete | US |  |
| Lifestyle and Cognition Follow-up Study 2015 | Grønkjær et al., 2019 | 1 | .81 | 1543 | 20.00 | 41.00 | G |  | BPP | same | complete | Denmark |  |
| Livingston et al., 2003 | Livingston et al., 2003 | 3 | .82 - .85 | 60 | 10.43 | 3.09 | G; Gc; Gv | 93.00 | Wechsler | same | complete | US |  |
| London longitudinal study of normal development | Hindley & Owen, 1979 | 6 | .55 - .89 | 84 - 193 | 1.50 - 14.00 | 1.50 - 3.00 | G |  | Alice Heim; mixed; Stanford Binet | different; same | complete | UK |  |
| Longitudinal Auckland Birthweight Collaborative study | D'Souza et al. 2016 | 1 | .75 | 546 | 7.00 | 4.00 | G | 109.80 | Wechsler | same\_family | complete | New Zealand | .96 |
| Lonner et al., 1985 | Lonner et al., 1985 | 1 | .56 | 100 | 12.10 | 2.00 | Gf |  | Raven | same | complete | US |  |
| Lothian Birth Cohort 1921 | Deary et al., 2013; Deary, Whalley et al., 2004; Deary, Whiteman et al., 2004; Gow et al, 2011; Gow et al., 2005 | 9 | .51 - .84 | 87 - 496 | 10.90 - 87.00 | 1.00 - 79.00 | G; Gf |  | MHT; Raven | same | complete | UK |  |
| Lothian Birth Cohort 1936 | Deary et al., 2012; Gow et al, 2011; Okely et al., 2019; Ritchie et al., 2015; von Stumm & Deary, 2013 | 7 | .54 - .69 | 550 - 1729 | 10.90 - 11.00 | 58.59 - 70.62 | G | 101.62 - 102.10 | MHT; mixed | different; same | complete; not complete | UK | .81 |
| Louisville Twin Study | Giangrande et al., 2019 | 10 | .78 - .91 | 306 - 942 | 7.00 - 12.00 | 1.00 - 8.00 | G | 98.34 - 102.82 | Wechsler | same | complete | US |  |
| Lowe et al., 1987 | Lowe et al., 1987 | 9 | .64 - .79 | 37 - 94 | 5.90 - 9.83 | 3.93 - 11.52 | G; Gc; Gv | 77.87 - 78.45 | Wechsler | same\_family | complete | US |  |
| MAGRIP | Schalke et al., 2013 | 4 | .72 - .87 | 344 | 11.70 | 40.00 | Gc; Gf; Gs; Gv |  | Leistungsprüfsystem | same | not complete | Luxembourg | .90 - .99 |
| MacArthur Longitudinal Twin Study | Cherny et al., 1994 | 3 | .43 - .67 | 656 - 661 | 1.17 - 1.67 | 0.33 - 0.83 | G | 104.30 | Bayley | same | complete | US |  |
| Martin et al., 1977 | Martin et al., 1977 | 2 | .80 - .83 | 40 | 20.00 | 0.12 | G |  | Shipley Institute of Living Scale; Slosson | same | complete | US |  |
| Matarazzo et al., 1973 | Matarazzo et al., 1973 | 3 | .84 - .91 | 29 | 24.00 | 0.39 | G; Gc; Gv | 118.10 | Wechsler | same | complete | US |  |
| Mayo's Older Americans Normative Studies, | Ivnik et al., 1995; Smith et al. 1997 | 4 | .70 - .86 | 160 - 271 | 69.00 - 72.20 | 3.70 - 3.97 | G; Gc; Gv |  | Wechsler | same | complete; not complete | US |  |
| McArdle & Epstein, 1987 | McArdle & Epstein, 1987 | 6 | .76 - .87 | 204 | 6.07 - 8.80 | 0.88 - 4.72 | G | 86.30 - 94.30 | Wechsler | same | complete | US |  |
| McArdle et al., 2002a | McArdle et al., 2002 | 10 | .29 - .65 | 161 | 4.00 | 1.80 | G; Ga; Gc; Gf; Gl; Gq; Grw; Gs; Gv; Gwm |  | Woodcock-Johnson | same | not complete | US | .82 - .95 |
| McArdle et al., 2002b | McArdle et al., 2002 | 10 | .65 - .83 | 177 | 8.00 | 1.60 | G; Ga; Gc; Gf; Gl; Gq; Grw; Gs; Gv; Gwm |  | Woodcock-Johnson | same | not complete | US | .82 - .95 |
| McArdle et al., 2002c | McArdle et al., 2002 | 10 | .57 - .92 | 269 | 16.00 | 1.40 | G; Ga; Gc; Gf; Gl; Gq; Grw; Gs; Gv; Gwm |  | Woodcock-Johnson | same | not complete | US | .82 - .95 |
| McArdle et al., 2002d | McArdle et al., 2002 | 10 | .58 - .89 | 280 | 31.00 | 3.00 - 3.75 | G; Ga; Gc; Gf; Gl; Gq; Grw; Gs; Gv; Gwm |  | Woodcock-Johnson | same | not complete | US | .82 - .95 |
| McArdle et al., 2002e | McArdle et al., 2002 | 10 | .58 - .94 | 218 | 67.00 | 3.10 | G; Ga; Gc; Gf; Gl; Gq; Grw; Gs; Gv; Gwm |  | Woodcock-Johnson | same | not complete | US | .82 - .95 |
| McGhee & Lieberman, 1990a | McGhee & Lieberman, 1990 | 1 | .89 | 25 | 15.50 | 0.06 | Gf |  | TONI | same | complete | US | .85 |
| McGhee & Lieberman, 1990b | McGhee & Lieberman, 1990 | 1 | .83 | 25 | 15.50 | 0.06 | Gf |  | TONI | same | complete | US | .85 |
| Metropolit 1953 Danish Male Birth Cohort | Hegelund et al., 2020 | 3 | .68 - .73 | 2486 - 7389 | 12.00 - 23.50 | 11.50 - 45.00 | G |  | mixed | different | complete; not complete | Denmark |  |
| Milgram, 1971a | Milgram, 1971 | 5 | .34 - .81 | 27 | 3.00 - 7.00 | 1.00 - 5.00 | G | 86.30 - 93.40 | Stanford Binet | same | complete | US |  |
| Milgram, 1971b | Milgram, 1971 | 5 | .44 - .79 | 32 | 3.00 - 7.00 | 1.00 - 5.00 | G | 84.80 - 89.10 | Stanford Binet | same | complete | US |  |
| Moore, 1967a | Moore, 1967 | 2 | .67 - .73 | 41 | 3.00 | 2.00 - 5.00 | G | 110.15 | Stanford Binet | same | complete | UK |  |
| Moore, 1967b | Moore, 1967 | 2 | .64 - .82 | 35 | 3.00 | 2.00 - 5.00 | G | 113.65 | Stanford Binet | same | complete | UK |  |
| Mortensen & Kleven, 1993 | Mortensen & Kleven, 1993 | 9 | .82 - .94 | 141 | 50.00 - 60.00 | 10.00 - 20.00 | G; Gc; Gv | 100.56 | Wechsler | same | complete | Denmark |  |
| National Child Development Study | Kanazawa et al., 2013 | 3 | .66 - .85 | 14469 - 15496 | 7.00 - 11.00 | 4.00 - 9.00 | G |  | mixed | different | not complete | UK | .69 - .83 |
| National Collaborative Perinatal Project | Beaver et al., 2013; Denno et al., 1982 | 2 | .51 - .67 | 3013 - 4174 | 4.00 | 3.00 | G | 94.30 - 96.73 | mixed | different | complete; not complete | US |  |
| Netherlands twin register | Bartels et al., 2002; Brouwer et al., 2014; Hoekstra et al., 2007; Polderman et al., 2006; van Soelen et al., 2011 | 33 | .47 - .80 | 177 - 394 | 5.30 - 12.00 | 1.50 - 13.00 | G; Gc; Gv | 99.90 - 115.50 | mixed; RAKIT; Wechsler | different; same; same\_family | complete; not complete | Netherlands |  |
| Nisbet, 1957 | Nisbet, 1957 | 3 | .39 - .48 | 141 | 22.50 | 24.00 | G; Gc; Gq |  | Simplex group test | same | not complete | UK |  |
| Nkaya et al., 1994a | Nkaya et al., 1994 | 3 | .54 - .67 | 63 | 12.30 - 12.34 | 0.04 - 0.08 | Gf |  | Raven | same | complete | France |  |
| Nkaya et al., 1994b | Nkaya et al., 1994 | 3 | .78 - .87 | 88 | 13.30 - 13.34 | 0.04 - 0.08 | Gf |  | Raven | same | complete | Congo |  |
| O'Connor et al., 2019 | O'Connor et al., 2019 | 1 | .46 | 87 | 4.92 | 1.25 | G | 95.92 | Wechsler | same | not complete | Ireland | .94 |
| Ölhafen et al., 2013 | Ölhafen et al., 2013 | 1 | .77 | 15 | 25.20 | 0.06 | Gf |  | BOMAT | same | complete | Switzerland | .82 |
| Örebo project | Magnusson & Backteman, 1978 | 24 | .44 - .84 | 1000 | 10.00 - 13.00 | 2.00 - 5.00 | G; Gc; Gf; Gv |  | DBA; mixed | different; same | not complete | Sweden | .94 - .95 |
| Paolo & Ryan, 1993 | Paolo & Ryan, 1993 | 3 | .89 - .93 | 61 | 78.93 | 0.18 | G; Gc; Gv | 103.90 | Wechsler | same | complete | US |  |
| Parenting for the First Time project | Narvaez et al., 2013 | 1 | .61 | 324 | 2.00 | 1.00 | G | 127.94 | Bayley | same | complete | US | .90 |
| Persson et al., 2016 | Persson et al., 2016 | 1 | .78 | 90 | 52.80 | 2.07 | Gf |  | CFT | same | complete | US | .95 |
| Physical Activity and Cognition in Early Childhood (PACE) study (Carson, Abdul Rahman, & Wiebe, 2017) | Verswijveren et al., 2020 | 1 | .59 | 77 | 4.21 | 0.50 | G | 112.67 | Woodcock-Johnson | same | not complete | Canada |  |
| Pluck et al., 2018 | Pluck et al., 2018 | 1 | .93 | 20 | 33.67 | 0.08 | G |  | Matrix-Matching Test | same | complete | Ecuador | .75 |
| Port Pirie Cohort Study | Keage et al., 2016 | 6 | .37 - .75 | 388 | 2.00 - 7.00 | 2.00 - 10.00 | G | 100.72 - 109.14 | mixed; Wechsler | different; same | complete | Australia |  |
| Project Head Start | Krohn & Lamp, 1999; Lamp & Krohn, 1990 | 36 | .34 - .85 | 65 - 71 | 4.75 - 6.75 | 2.00 - 4.90 | G; Gc; Gf; Gq; Gv; Gwm | 93.30 - 93.80 | Kaufmann; Stanford Binet | same | complete | US | .86 - .94 |
| Quereshi, 1968a | Quereshi, 1968 | 3 | .68 - .80 | 62 | 5.50 | 0.29 | G; Gc; Gv |  | Wechsler | same | not complete | US |  |
| Quereshi, 1968b | Quereshi, 1968 | 3 | .54 - .72 | 68 | 7.00 | 0.29 | G; Gc; Gv |  | Wechsler | same | not complete | US |  |
| Quereshi, 1968c | Quereshi, 1968 | 3 | .80 - .92 | 66 | 9.00 | 0.29 | G; Gc; Gv |  | Wechsler | same | not complete | US |  |
| Quereshi, 1968d | Quereshi, 1968 | 3 | .75 - .82 | 64 | 11.00 | 0.29 | G; Gc; Gv |  | Wechsler | same | not complete | US |  |
| Quereshi, 1968e | Quereshi, 1968 | 3 | .82 - .89 | 68 | 13.00 | 0.29 | G; Gc; Gv |  | Wechsler | same | not complete | US |  |
| Raguet et al., 1996 | Raguet et al., 1996 | 1 | .90 | 51 | 72.00 | 1.03 | G | 111.50 | Wechsler | same | complete | US |  |
| Randall et al., 2016 | Randall et al., 2016 | 1 | .70 | 318 | 19.05 | 0.12 | G |  | Wonderlic | same | complete | US |  |
| Raz et al., 2008 | Raz et al., 2008 | 4 | .64 - .81 | 85 - 87 | 54.29 | 5.26 | Gc; Gf; Gwm |  | CFT; ETS; mixed | same | complete | US | .95 |
| Razavieh & Shahim, 1990 | Razavieh & Shahim, 1990 | 3 | .76 - .87 | 30 | 5.30 | 0.11 | G; Gc; Gv | 101.10 | Wechsler | same | complete | Iran |  |
| Reeve & Lam, 2005 | Reeve & Lam, 2005 | 2 | .90 - .94 | 123 | 19.93 | 0.00 - 0.01 | G |  | Employee Aptitude Survey | same | complete | US |  |
| Reuben et al., 2019 | Reuben et al., 2019 | 3 | .49 - .70 | 1989 | 5.00 - 12.00 | 6.00 - 13.00 | G | 95.80 - 96.25 | Wechsler | same\_family | not complete | US |  |
| Richerson et al., 2014 | Richerson et al., 2014 | 5 | .65 - .82 | 352 | 7.50 | 2.80 | G; Gc; Gs; Gv; Gwm | 90.30 | Wechsler | same | complete; not complete | US |  |
| Rochester Longitudinal Study | Sameroff et al., 1993 | 1 | .72 | 152 | 4.00 | 9.00 | G |  | Wechsler | same\_family | not complete | US | .89 |
| Rose et al., 1991 | Rose et al., 1991 | 3 | .64 - .82 | 45 - 49 | 3.00 - 4.00 | 1.00 - 2.00 | G | 87.80 - 92.20 | mixed; Stanford Binet | different; same | complete | US |  |
| Rugg & Colloton, 1921 | Rugg & Colloton, 1921 | 1 | .84 | 137 | 9.31 | 1.08 | G |  | Stanford Binet | same | complete | US |  |
| Ryan et al., 2010 | Ryan et al., 2010 | 5 | .49 - .80 | 43 | 7.77 | 0.91 | G; Gc; Gs; Gv; Gwm | 111.63 | Wechsler | same | complete | US | .87 - .96 |
| Schwartzman et al., 1987 | Schwartzman et al., 1987 | 3 | .54 - .82 | 259 | 64.70 | 40.00 | G; Gc; Gv |  | Examination M | same | complete | Canada | .85 - .95 |
| Scottish Mental Survey | Deary et al., 2009 | 1 | .66 | 73 | 11.00 | 66.00 | G |  | MHT | same test | complete | Scottland |  |
| Scottish Mental Survey 1932 | Deary et al., 2004; Deary, Whalley et al., 2000 | 2 | .63 - .78 | 87 - 101 | 11.00 - 77.00 | 1.00 - 66.00 | G; Gf |  | MHT; Raven | same | complete | UK |  |
| Scottish Mental Survey 1947 | Deary & Brett, 2015; Deary et al., 2008 | 3 | .50 - .80 | 107 - 1112 | 11.00 | 0.08 - 16.17 | G | 111.20 - 118.50 | mixed | different | complete | UK |  |
| Seattle Longitudinal Study | Schaie, 2013 | 1 | .85 | 2787 | 53.00 | 7.00 | G |  | PMA | same test | complete | US | .89 |
| Sherman et al., 2014 | Sherman et al., 2014 | 1 | .75 | 45 | 10.16 | 3.00 | G | 118.50 | Wechsler | same\_family | complete | US |  |
| Singapore-Longitudinal Aging Brain Study | Leong et al., 2017 | 18 | .69 - .93 | 61 - 111 | 67.10 - 71.10 | 2.00 - 6.00 | G; Gs; Gwm | 98.63 - 100.14 | mixed | same | not complete | Singapore |  |
| Smith et al., 1996 | Smith et al., 1996 | 3 | .66 - .79 | 47 | 9.67 | 2.75 | G; Gc; Gv | 81.72 | Wechsler | same\_family | complete | US |  |
| Snow et al., 1989 | Snow et al., 1989 | 3 | .85 - .90 | 101 | 67.10 | 1.10 | G; Gc; Gv | 116.00 | Wechsler | same | complete | Canada | .76 - .92 |
| Sparks et al., 2013 | Sparks et al., 2013 | 1 | .68 | 54 | 6.75 | 10.00 | G |  | CTB | same | complete | US | .86 |
| Starkweather, 2009 | Starkweather, 2009 | 2 | .42 - .69 | 263 | 71.83 | 1.75 | Gc; Gf |  | Wechsler | same | not complete | US |  |
| Strand, 2004 | Strand, 2004 | 4 | .76 - .89 | 10621 | 10.50 | 3.00 | G; Gc; Gf; Gq | 99.50 | CAT | same | complete | UK | .91 - .94 |
| The Harvard Growth Study | Humphreys et al., 1985 | 90 | .53 - .90 | 391 - 495 | 8.00 - 16.00 | 1.00 - 9.00 | G |  | mixed | different; same; same\_family | complete | US |  |
| The LOGIC study | Schneider et al., 2014; Ziegler et al., 2012 | 33 | .26 - .81 | 118 - 193 | 4.00 - 17.00 | 1.00 - 20.50 | Gc; Gf |  | CFT; CMMS; mixed; Wechsler | different; same; same\_family | complete; not complete | Germany | .86 - .97 |
| The Third Harvard Growth Study | Dauphinais & Bradley, 1979 | 1 | .62 | 80 | 13.00 | 49.00 | G |  | mixed | different | complete | US |  |
| Thompson & Molly, 1993a | Thompson & Molly, 1993 | 3 | .82 - .92 | 26 | 16.12 | 0.26 | G; Gc; Gv | 97.30 | Wechsler | same | complete | US |  |
| Thompson & Molly, 1993b | Thompson & Molly, 1993 | 3 | .79 - .95 | 26 | 16.06 | 1.51 | G; Gc; Gv | 102.20 | Wechsler | same | complete | US |  |
| Thompson & Sota, 1998 | Thompson & Sota, 1998 | 3 | .74 - .88 | 23 | 16.40 | 0.11 | G; Gc; Gv | 108.10 | Wechsler | same\_family | complete | Canada | .92 - .96 |
| Thompson & Sota, 1998a | Thompson & Sota, 1998 | 3 | .82 - .92 | 26 | 16.09 | 0.26 | G; Gc; Gv | 97.30 | Wechsler | same | complete | Canada |  |
| Thompson & Sota, 1998b | Thompson & Sota, 1998 | 3 | .79 - .95 | 26 | 16.09 | 1.51 | G; Gc; Gv | 102.20 | Wechsler | same | complete | Canada |  |
| Thorndike, 1977 b | Thorndike, 1977 | 1 | .74 | 248 | 5.00 | 3.00 | G | 110.30 | Stanford Binet | same | complete | US |  |
| Thorndike, 1977a | Thorndike, 1977 | 1 | .70 | 211 | 4.00 | 3.00 | G | 110.20 | Stanford Binet | same | complete | US |  |
| Thorndike, 1977c | Thorndike, 1977 | 1 | .77 | 204 | 6.00 | 3.00 | G | 108.20 | Stanford Binet | same | complete | US |  |
| Tuma & Appelbaum, 1980 | Tuma & Appelbaum, 1980 | 3 | .89 - .95 | 45 | 10.43 | 0.49 | G; Gc; Gv | 102.40 | Wechsler | same | complete | US | .66 - .75 |
| Twin Infant Project | Bishop et al., 2003 | 28 | .06 - .81 | 535 - 1395 | 1.00 - 10.00 | 1.00 - 11.00 | G |  | Bayley; mixed; Stanford Binet; Wechsler | different; same | complete | US |  |
| Twins Early Development Study | Cowan et al., 2018; Haworth et al., 2007 | 4 | .40 - .66 | 948 - 987 | 7.00 - 10.00 | 1.00 - 3.00 | G |  | mixed | different | not complete | UK |  |
| Twins, Adoptees, Peers and Siblings | Segal et al., 2007 | 3 | .42 - .54 | 84 | 5.11 | 5.65 | G; Gc; Gv | 105.86 | Wechsler | same | not complete | US |  |
| UVG longitudinal study | Mansukoski et al., 2020 | 15 | .61 - .88 | 1430 - 12733 | 6.50 - 12.50 | 1.00 - 8.00 | G | 91.32 - 98.09 | Otis | same | complete | Guatemala |  |
| Uka et al., 2019 | Uka et al., 2019 | 3 | .68 - .79 | 96 - 136 | 4.50 - 5.08 | 0.58 - 1.17 | Gf |  | Raven | same | complete | Kosovo | .72 |
| Van der Stel et al., 2013 | Van der Stel et al., 2013 | 3 | .71 - .82 | 25 | 13.00 - 14.00 | 1.00 - 2.00 | G |  | mixed | same | not complete | Netherlands |  |
| Vance et al., 1998 | Vance et al., 1998 | 3 | .89 - .94 | 166 | 9.80 | 3.00 | G; Gc; Gv | 88.60 | Wechsler | same\_family | complete | US |  |
| Vietnam Era Twin Study of Aging | Franz et al., 2011; Kremen et al., 2019; Lyons et al., 2009; Lyons et al., 2017 | 10 | .73 - .85 | 795 - 1273 | 19.67 - 56.00 | 5.65 - 42.00 | Gc |  | AFQT | same | complete | US; Vietnam |  |
| Vietnam Experience Study | Larsen et al., 2008 | 1 | .85 | 4321 | 19.92 | 17.90 | Gc |  | AFQT | same | complete | US |  |
| Villado et al., 2016 | Villado et al., 2016 | 4 | .62 - .86 | 307 | 20.08 | 0.12 | G; Gf |  | Raven; Wonderlic | same | complete; not complete | US | .75 - .89 |
| Virginia Cognitive Aging Project | Salthouse, 2012 I; Salthouse, 2014 | 17 | .66 - .92 | 182 - 659 | 28.80 - 72.30 | 2.30 - 6.00 | Gc; Gf; Gs; Gv; Gwm |  | mixed; Raven; Wechsler | same | complete; not complete | US |  |
| Virginia Cognitive Aging Project \_a | Salthouse, 2012 II | 10 | .80 - .96 | 148 | 28.50 | 0.02 - 2.70 | Gc; Gf; Gs; Gv; Gwm |  | mixed; Wechsler | same | not complete | US |  |
| Virginia Cognitive Aging Project \_b | Salthouse, 2012 II | 10 | .76 - .95 | 313 | 49.50 | 0.02 - 2.70 | Gc; Gf; Gs; Gv; Gwm |  | mixed; Wechsler | same | not complete | US |  |
| Virginia Cognitive Aging Project \_c | Salthouse, 2012 II | 10 | .74 - .95 | 268 | 69.50 | 0.02 - 2.70 | Gc; Gf; Gs; Gv; Gwm |  | mixed; Wechsler | same | not complete | US |  |
| Virginia Cognitive Aging Project \_d | Salthouse, 2012 II | 10 | .63 - .92 | 54 | 88.50 | 0.02 - 2.70 | Gc; Gf; Gs; Gv; Gwm |  | mixed; Wechsler | same | not complete | US |  |
| Watkins & Smith, 2013 | Watkins & Smith, 2013 | 5 | .65 - .81 | 344 - 348 | 8.74 | 2.84 | G; Gc; Gs; Gv; Gwm | 90.32 | Wechsler | same | complete | US | .79 - .89 |
| Welter et al., 2018 | Welter et al., 2018 | 2 | .46 - .56 | 24 | 8.04 | 0.69 | Gf |  | CRT; Raven | same | complete | Germany |  |
| West of Scotland Twenty-07 study | Deary et al., 2009 | 2 | .74 - .80 | 524 | 56.10 | 12.80 | Gq; Grw |  | Alice Heim | same | complete | UK |  |
| Western Reserve Reading Project | Hart et al., 2007 | 1 | .72 | 409 | 6.00 | 1.00 | G | 100.41 | Stanford Binet | same | not complete | US | .95 |
| Yuan et al., 2018 | Yuan et al., 2018 | 12 | .75 - .91 | 24 - 37 | 64.00 - 66.90 | 1.26 - 7.53 | Gc; Gf |  | CFT; ETS | same | complete | US | .95 |
| Zax et al., 1972 | Zax et al., 1972 | 4 | .58 - .68 | 119 - 284 | 9.00 | 1.00 - 4.00 | Gc |  | OQST | same\_family | complete | US |  |
| Zurich Longitudinal Study on Cognitive Aging | Aschwanden et al., 2017 | 2 | .72 - .91 | 236 | 74.12 | 4.00 | Gf; Gl |  | mixed; Raven | same | not complete | Switzerland |  |
| Zurich generational study | Jenni et al., 2011 | 15 | .56 - .80 | 215 - 245 | 7.00 - 16.00 | 1.00 - 9.00 | G | 102.92 - 111.25 | AID; mixed; Wechsler | different; same; same\_family | complete | Switzerland |  |

**Table S2**

*Frequencies and Descriptive Statistics of Study Variables*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Correlation Type | | | Manifest | | | | | | | | | | | Latent |
| Sub-Dataset | All abils. | | | *g* | Ga | Gc | Gf | Gl | Gq | Grw | Gs | Gv | Gwm | All abils. |
| ***e* effect sizes** | | 1288 | | 650 | 5 | 195 | 172 | 13 | 15 | 7 | 52 | 134 | 45 | 50 |
| ***h* samples** | | 205 | | 151 | 5 | 76 | 60 | 8 | 12 | 7 | 26 | 60 | 24 | 6 |
| ***n* overall** | | 87508 | | 75306 | 1105 | 32634 | 23640 | 1586 | 13244 | 1957 | 5898 | 9737 | 4535 | 18107 |
| ***n* per effect size** | | | |  |  |  |  |  |  |  |  |  |  |  |
| - *M* | | 440.53 | | 593.07 | 221 | 329.48 | 290.10 | 201.77 | 896.20 | 279.57 | 224.08 | 209.61 | 197.53 | 1743.10 |
| - *SD* | | 1391.1 | | 1764.26 | 53.22 | 924.62 | 957.95 | 70.16 | 2694.1 | 122.86 | 132.68 | 218.71 | 150.06 | 1951.82 |
| - Minimal value | | 9 | | 9 | 161 | 14 | 10 | 38 | 38 | 161 | 21 | 14 | 14 | 125 |
| - Maximal value | | 15496 | | 15496 | 280 | 10621 | 10621 | 280 | 10621 | 524 | 659 | 1000 | 659 | 12661 |
| - Median | | 161 | | 193 | 218 | 148 | 121 | 218 | 177 | 269 | 210 | 152 | 148 | 990 |
| - Mode | | 495 | | 495 | 269 | 51 | 51 | 153 | 65 | 161 | 369 | 152 | 169 | 990 |
| ***r*** | |  | |  |  |  |  |  |  |  |  |  |  |  |
| - *M* | | .67 | | .67 | .64 | .69 | .63 | .69 | .66 | .74 | .70 | .66 | .62 | .85 |
| - *SD* | | 0.19 | | 0.19 | 0.09 | 0.21 | 0.19 | 0.10 | 0.20 | 0.23 | 0.19 | 0.17 | 0.23 | 0.17 |
| - Minimal value | | -.51 | | .06 | .57 | -.51 | -.05 | .54 | .38 | .29 | .14 | .19 | -.25 | .38 |
| - Maximal value | | .98 | | .98 | .78 | .96 | .92 | .91 | .94 | .94 | .93 | .97 | .87 | 1.05 |
| - Median | | .71 | | .71 | .60 | .73 | .66 | .71 | .74 | .78 | .76 | .66 | .68 | .90 |
| - Mode | | .80 | | .78 | .57 | .74 | .87 | .54 | .38 | .29 | .69 | .54 | .84 | .89 |
| **Duration of the test-retest intervals (years)** | | | | | | | | |  |  |  |  |  |  |  |
| - *M* | | 6.52 | | 6.75 | 2.26 | 8.24 | 6.18 | 5.01 | 7.50 | 10.25 | 4.19 | 5.58 | 2.58 | 5.96 |
| - *SD* | | 10.81 | | 11.79 | 0.93 | 11.65 | 10.04 | 4.25 | 12.61 | 16.86 | 6.18 | 7.89 | 1.84 | 3.22 |
| - Minimal value | | 0.003 | | 0.003 | 1.40 | 0.02 | 0.02 | 0.07 | 0.07 | 1.40 | 0.02 | 0.02 | 0.02 | 0.50 |
| - Maximal value | | 79.00 | | 79.00 | 3.24 | 61.00 | 61.00 | 15.00 | 47.40 | 47.40 | 40.00 | 47.40 | 6.34 | 12.80 |
| - Median | | 3.00 | | 3.00 | 1.80 | 3.70 | 2.00 | 4.00 | 2.90 | 3.10 | 2.70 | 3.00 | 2.00 | 6.00 |
| - Mode | | 2.00 | | 1.00 | 1.40 | 2.00 | 2.00 | 5.00 | 2.00 | 1.80 | 2.00 | 2.00 | 2.00 | 4.00 |
| **Age (years)** | |  | |  |  |  |  |  |  |  |  |  |  |  |
| - *M* | | 18.07 | | 12.03 | 25.20 | 22.65 | 22.59 | 43.38 | 21.64 | 28.89 | 38.06 | 19.24 | 30.75 | 57.46 |
| - *SD* | | 21.37 | | 14.73 | 25.55 | 23.80 | 23.81 | 26.26 | 22.30 | 24.14 | 30.01 | 22.39 | 28.92 | 22.33 |
| - Minimal value | | 1.00 | | 1.00 | 4.00 | 3.00 | 3.90 | 4.00 | 4.00 | 4.00 | 3.00 | 3.00 | 3.00 | 4.25 |
| - Maximal value | | 88.50 | | 87.00 | 67.00 | 88.50 | 88.50 | 74.12 | 67.00 | 67.00 | 88.50 | 88.50 | 88.50 | 73.20 |
| - Median | | 9.10 | | 8.00 | 16.00 | 10.43 | 10.08 | 56.30 | 10.50 | 20.10 | 29.90 | 9.73 | 16.00 | 64.90 |
| - Mode | | 4.00 | | 3.00 | 16.00 | 10.00 | 4.00 | 56.30 | 4.75 | 4.00 | 3.00 | 4.00 | 3.00 | 64.90 |
| **Gender (female percentage %)** | | | | |  |  |  |  |  |  |  |  |  |  |
| - *M* | | 50.05 | | 48.94 | 53.50 | 47.73 | 54.99 | 52.93 | 50.26 | 46.07 | 54.06 | 48.61 | 57.96 | 53.62 |
| - *SD* | | 23.19 | | 27.07 | 0.00 | 23.21 | 16.02 | 2.78 | 15.52 | 20.32 | 9.30 | 18.63 | 12.07 | 1.56 |
| - Minimal value | | 0.00 | | 0.00 | 53.50 | 0.00 | 0.00 | 46.20 | 0.00 | 0.00 | 31.00 | 0.00 | 31.00 | 52.00 |
| - Maximal value | | 100.00 | | 100.00 | 53.50 | 100.00 | 100.00 | 54.50 | 59.15 | 55.00 | 73.00 | 100.00 | 100.00 | 55.00 |
| - Median | | 50.00 | | 48.97 | 53.50 | 50.00 | 52.00 | 53.40 | 53.50 | 53.50 | 53.50 | 49.75 | 58.23 | 55.00 |
| - Mode | | 0.00 | | 48.00 | 53.50 | 0.00 | 48.00 | 54.50 | 53.50 | 53.50 | 65.00 | 50.00 | 65.00 | 55.00 |
| **General cognitive ability level** | | | | |  |  |  |  |  |  |  |  |  |  |  |  |
| - *e* effect sizes | | 456 | | 354 | 0/0 | 37 | 8 | 0/0 | 2 | 0/0 | 11 | 32 | 12 | 0/0 |
| - *h* samples | | 79 | | 85 | 0/0 | 26 | 4 | 0/0 | 1 | 0/0 | 6 | 22 | 6 | 0/0 |
| - *M* | | 104.19 | | 105.92 | 0/0 | 97.87 | 97.87 | 0/0 | 96.55 | 0/0 | 100.12 | 97.55 | 99.58 | 0/0 |
| - *SD* | | 10.37 | | 9.49 | 0/0 | 12.75 | 6.41 | 0/0 | 4.17 | 0/0 | 6.26 | 13.10 | 6.26 | 0/0 |
| - Minimal value | | 77.83 | | 77.83 | 0/0 | 77.83 | 91.62 | 0/0 | 93.60 | 0/0 | 90.32 | 77.83 | 90.32 | 0/0 |
| - Maximal value | | 134.17 | | 134.17 | 0/0 | 132.37 | 111.36 | 0/0 | 99.50 | 0/0 | 111.63 | 127.93 | 111.63 | 0/0 |
| - Median | | 105.93 | | 108.03 | 0/0 | 99.90 | 96.25 | 0/0 | 96.55 | 0/0 | 100.14 | 100.56 | 100.02 | 0/0 |
| - Mode | | 113.30 | | 113.30 | 0/0 | 77.83 | 93.60 | 0/0 | 93.60 | 0/0 | 100.14 | 77.83 | 100.14 | 0/0 |
| **Publication type (*e* effect sizes / *h* samples)** | | | | | |  |  |  |  |  |  |  |  |  |
| - P. reviewed | 1202/197 | | | 640/146 | 5/5 | 179/74 | 134/56 | 13/8 | 15/12 | 7/7 | 52/26 | 112/58 | 45/24 | 44/5 |
| - Other | | 86/8 | | 10/5 | 0/0 | 16/2 | 38/4 | 0/0 | 0/0 | 0/0 | 0/0 | 22/2 | 0/0 | 6/1 |
| **Test instrument (*e* effect sizes / *h* samples)** | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |
| - Alice\_Heim | | 32/4 | | 30/3 | 0/0 | 0/0 | 0/0 | 0/0 | 1/1 | 1/1 | 0/0 | 0/0 | 0/0 | 1/1 |
| - Bayley | | 11/6 | | 11/6 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 |
| - CFT | | 37/8 | | 0/0 | 0/0 | 0/0 | 37/8 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 6/1 |
| - Kuhlmann | | 8/6 | | 8/6 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 |
| - MHT | | 15/5 | | 15/5 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 |
| - Raven | | 41/17 | | 0/0 | 0/0 | 0/0 | 41/17 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 |
| - Stanford\_B. | | 74/24 | | 55/23 | 0/0 | 5/2 | 0/0 | 0/0 | 4/1 | 0/0 | 0/0 | 5/2 | 5/2 | 0/0 |
| - Wechsler | | 338/85 | | 150/72 | 0/0 | 93/47 | 7/5 | 0/0 | 0/0 | 0/0 | 6/6 | 76/40 | 6/6 | 0/0 |
| - Woodcock\_J. | | 57/7 | | 6/6 | 0/0 | 8/6 | 5/5 | 5/5 | 5/5 | 5/5 | 8/6 | 5/5 | 5/5 | 0/0 |
| - Other\_inst. | | 192/48 | | 61/25 | 0/0 | 61/21 | 51/19 | 1/1 | 4/4 | 1/1 | 1/1 | 12/8 | 0/0 | 8/3 |
| - Mixed\_inst. | | 483/52 | | 314/34 | 0/0 | 28/7 | 31/13 | 7/2 | 1/1 | 0/0 | 37/13 | 36/10 | 29/11 | 35/2 |
| **Varying measurement instrument (*e* effect sizes / *h* samples)** | | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |
| - Different test | | 399/35 | | 293/30 | 0/0 | 35/5 | 36/5 | 0/0 | 0/0 | 0/0 | 6/1 | 23/4 | 6/1 | 0/0 |
| - Same test | 751/172 | | | 303/122 | 0/0 | 123/65 | 121/55 | 0/0 | 0/0 | 0/0 | 46/25 | 79/52 | 39/23 | 43/4 |
| - Same t. family | | 102/27 | | 51/22 | 0/0 | 35/13 | 5/3 | 0/0 | 0/0 | 0/0 | 0/0 | 11/8 | 0/0 | 1/1 |
| **Complete test (*e* effect sizes / *h* samples)** | | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |
| - Complete test | | 928/161 | | 585/124 | 0/0 | 107/45 | 123/40 | 0/0 | 7/4 | 2/2 | 9/7 | 80/36 | 15/10 | 7/2 |
| - Not complete | | 358/57 | | 63/32 | 0/0 | 88/33 | 49/22 | 0/0 | 8/8 | 5/5 | 43/19 | 54/25 | 30/14 | 43/4 |
| **Geographic location (*e* effect sizes / *h* samples)** | | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |
| - Africa | | 3/1 | | 0/0 | 0/0 | 0/0 | 3/1 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 |
| - Asia | | 33/5 | | 8/3 | 0/0 | 5/3 | 6/1 | 0/0 | 0/0 | 0/0 | 6/1 | 2/2 | 6/1 | 0/0 |
| - Europe | | 420/62 | | 170/36 | 0/0 | 71/15 | 83/29 | 7/2 | 4/4 | 2/2 | 15/7 | 62/11 | 6/4 | 38/4 |
| - N. America | | 808/134 | | 449/108 | 0/0 | 119/59 | 79/29 | 6/6 | 11/8 | 5/5 | 31/18 | 70/47 | 33/19 | 12/2 |
| - Oceania | | 8/3 | | 7/2 | 0/0 | 0/0 | 1/1 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 |
| - S/C America | | 16/2 | | 16/2 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 | 0/0 |
| **Publication year** | | | |  |  |  |  |  |  |  |  |  |  |  |  |
| - *M* | | 1998.7 | | 1993.7 | 2002 | 2002.2 | 2007.3 | 2008.2 | 1996.8 | 2005 | 2009.6 | 1998.8 | 2007.4 | 2011.70 |
| - *SD* | | 18.64 | | 21.44 | 0 | 15.28 | 11.98 | 11.71 | 13.98 | 5.51 | 8.18 | 13.71 | 8.80 | 3.73 |
| - Minimal value | | 1921 | | 1921 | 2002 | 1957 | 1964 | 1978 | 1957 | 2002 | 1991 | 1966 | 1988 | 2003 |
| - Maximal value | | 2022 | | 2020 | 2002 | 2022 | 2022 | 2017 | 2016 | 2016 | 2020 | 2019 | 2017 | 2018 |
| - Median | | 2004 | | 2002 | 2002 | 2007 | 2012 | 2017 | 2002 | 2002 | 2012 | 2003 | 2012 | 2012 |
| - Mode | | 2017 | | 1985 | 2002 | 2014 | 2009 | 2017 | 2002 | 2002 | 2017 | 2009 | 2012 | 2012 |
| **Reliability** | |  | |  |  |  |  |  |  |  |  |  |  |  |
| - *e* effect sizes | | 250 | | 67 | 5 | 28 | 78 | 11 | 6 | 5 | 20 | 17 | 13 | 0/0 |
| - *h* samples | | 45 | | 29 | 5 | 18 | 28 | 6 | 6 | 5 | 14 | 14 | 11 | 0/0 |
| - *M* | | .89 | | .91 | .89 | .90 | .88 | .85 | .95 | .94 | .87 | .84 | .88 | 0/0 |
| - *SD* | | 0.07 | | 0.06 | 0 | 0.06 | 0.08 | 0.09 | 0.01 | 0 | 0.05 | 0.08 | 0.03 | 0/0 |
| - Minimal value | | .66 | | .69 | .89 | .75 | .69 | .77 | .93 | .94 | .79 | .66 | .84 | 0/0 |
| - Maximal value | | .99 | | .98 | .89 | .97 | .97 | .94 | .95 | .94 | .96 | .99 | .93 | 0/0 |
| - Median | | .90 | | .94 | .89 | .92 | .90 | .77 | .95 | .94 | .87 | .82 | .89 | 0/0 |
| - Mode | | .90 | | .96 | .89 | .94 | .90 | .77 | .95 | .94 | .87 | .82 | .89 | 0/0 |

*Note.* Descriptive statistics are reported separately for manifest and latent correlations. All abils. = dataset including *g* and broad CHC abilities. t. = test. N. America = North America. S/C America = South America or Central America. Note that for the continuous variables *n* per study, *r*, duration of the test-retest intervals, age, and publication year we did not report the available *e* effect sizes and *h* samples, because there were no missing values on these variables.

**Table S3**

*Correlations with Confidence Intervals of all Continuous Variables Based on the Complete Dataset.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable | 1 | 2 | 3 | 4 | 5 | 6 |
|  |  |  |  |  |  |  |
| ***1. r* effect size** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| ***2. n* per effect size** | .05 |  |  |  |  |  |
|  | [-.01, .10] |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **3. Duration of the test-retest intervals** | -.22\*\* | .01 |  |  |  |  |
|  | [-.27, -.16] | [-.05, .06] |  |  |  |  |
|  |  |  |  |  |  |  |
| **4. Age** | .42\*\* | -.08\*\* | -.04 |  |  |  |
|  | [.38, .47] | [-.14, -.03] | [-.09, .02] |  |  |  |
|  |  |  |  |  |  |  |
| **5. General cognitive ability level** | -.07 | -.15\*\* | .09\* | -.05 |  |  |
|  | [-.16, .02] | [-.23, -.05] | [.00, .18] | [-.14, .05] |  |  |
|  |  |  |  |  |  |  |
| **6. Publication year** | -.19\*\* | .11\*\* | .18\*\* | .13\*\* | -.09 |  |
|  | [-.24, -.14] | [.06, .17] | [.13, .23] | [.07, .18] | [-.18, .01] |  |
|  |  |  |  |  |  |  |
| **7. α Reliability** | .10 | -.14\* | .04 | -.18\*\* | .03 | -.09 |
|  | [-.02, .22] | [-.26, -.01] | [-.09, .16] | [-.30, -.06] | [-.22, .27] | [-.21, .03] |
|  |  |  |  |  |  |  |

*Note.* Values in square brackets indicate the 95% confidence interval for each correlation. \* indicates *p* < .05. \*\* indicates *p* < .01.

**Table S4**

*Chi Square Tests of all Categorical Variables Based on the Complete Dataset.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **1. Cognitive Ability** | | | **2. Publication type** | | | **3. Test instrument** | | | **4. Varying instrument** | | | **5. Complete test** | | |
|  | *Chi²* | *df* | *p* | *Chi²* | *df* | *p* | *Chi²* | *df* | *p* | *Chi²* | *df* | *p* | *Chi²* | *df* | *p* |
| **1. Cognitive Ability** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **2. Publication type** | 124.08 | 9 | < .001 |  |  |  |  |  |  |  |  |  |  |  |  |
| **3. Test instrument** | 1215.63 | 90 | < .001 | 227.24 | 10 | < .001 |  |  |  |  |  |  |  |  |  |
| **4. Varying instrument** | 171.89 | 18 | < .001 | 70.68 | 2 | < .001 | 757.65 | 20 | < .001 |  |  |  |  |  |  |
| **5. Complete test** | 315.07 | 9 | < .001 | 28.52 | 1 | < .001 | 244.37 | 10 | < .001 | 38.43 | 2 | < .001 |  |  |  |
| **6. Geographic location** | 139.67 | 45 | < .001 | 36.81 | 5 | < .001 | 412.32 | 50 | < .001 | 35.73 | 10 | < .001 | 61.88 | 5 | < .001 |

**Table S5**

*Equations for the Meta-Regressions Testing Linear and Non-Linear Test-Retest Interval and Age Effects.*

| Meta-Regression Model | Equation | Description of Parameters |
| --- | --- | --- |
| **H1: Test-Retest Interval** | |  |
| Linear interval model |  | *b0* = *y* intercept  *b1* = linear slope of interval |
| Quadratic interval model |  | *b0* = *y* intercept  *b1* = linear slope of interval  *b2* = quadratic slope of interval |
| Exponential interval model |  | *b0* = horizontal asymptote  *b1* = interval scaling factor  *b2* = interval growth rate |
| **H2: Age** |  |  |
| ***Step 1. Age Without Additional Predictors*** | |  |
| Linear age model |  | *b0* = *y* intercept  *b1* = linear slope of age |
| Quadratic age model |  | *b0* = *y* intercept  *b1* = linear slope of age  *b2* = quadratic slope of age |
| Linear spline age model |  | *b0* = *y* intercept  *b1* = linear slope through age 6  *b2* = linear slope between age 6 and 18  *b3* = linear slope between age 18 and 65  *b4* = linear slope between age 65 and 80  *b5* = linear slope after age 80 |
| Exponential age model |  | *b0* = horizontal asymptote  *b1* = age scaling factor  *b2* = age growth rate |
| ***Step 2. Test-Retest Interval and Age*** | |  |
| Linear interval + linear age model |  | *b0* = *y* intercept  *b1* = linear slope of interval  *b2* = linear slope of age |
| Linear interval + quadratic age model |  | *b0* = *y* intercept  *b1* = linear slope of interval  *b2* = linear slope of age  *b3* = quadratic slope of age |
| Linear interval + linear spline age model |  | *b0* = *y* intercept  *b1* = linear slope of interval  *b2* = linear slope through age 6  *b3* = linear slope between age 6 and 18  *b4* = linear slope between age 18 and 65  *b5* = linear slope between age 65 and 80  *b6* = linear slope after age 80 |
| Linear interval + exponential age model |  | *b0* = *y* intercept of interval function  *b1* = linear slope of interval  *b2* = age scaling factor  *b3* = age growth rate |
| Quadratic interval + linear age model |  | *b0* = *y* intercept  *b1* = linear slope of interval  *b2* = quadratic slope of interval  *b3* = linear slope of age |
| Quadratic interval + quadratic age model |  | *b0* = *y* intercept  *b1* = linear slope of interval  *b2* = quadratic slope of interval  *b3* = linear slope of age  *b4* = quadratic slope of age |
| Quadratic interval + linear spline age model |  | *b0* = *y* intercept  *b1* = linear slope of interval  *b2* = quadratic slope of interval  *b3* = linear slope through age 6  *b4* = linear slope between age 6 and 18  *b5* = linear slope between age 18 and 65  *b6* = linear slope between age 65 and 80  *b7* = linear slope after age 80 |
| Quadratic interval + exponential age model |  | *b0* = *y* intercept  *b1* = linear slope of interval  *b2* = quadratic slope of interval  *b3* = age scaling factor  *b4* = age growth rate |
| Exponential interval + linear age model |  | *b0* = horizontal asymptote  *b1* = interval scaling factor  *b2* = growth rate  *b3* = linear slope of age |
| Exponential interval + quadratic age model |  | *b0* = horizontal asymptote  *b1* = interval scaling factor  *b2* = growth rate  *b3* = linear slope of age  *b4* = quadratic slope of age |
| Exponential interval + linear spline age model |  | *b0* = horizontal asymptote  *b1* = interval scaling factor  *b2* = growth rate  *b3* = linear slope through age 6  *b4* = linear slope between age 6 and 18  *b5* = linear slope between age 18 and 65  *b6* = linear slope between age 65 and 80  *b7* = linear slope after age 80 |
| Exponential interval + exponential age model |  | *b0* = horizontal asymptote  *b1* = interval scaling factor  *b2* = interval growth rate  *b3* = age scaling factor  *b4* = age growth rate |
| ***Step 3. Interaction of Test-Retest Interval and Age*** | |  |
| Linear interval × linear age model |  | *b0* = *y* intercept  *b1* = linear slope of interval  *b2* = linear slope of age  *b3* = interaction between linear slope of interval and linear slope of age |
| Linear interval × quadratic age model |  | *b0* = *y* intercept  *b1* = linear slope of interval  *b2* = linear slope of age  *b3* = quadratic slope of age  *b4* = interaction between linear slope of interval and linear slope of age |
| Linear interval × linear spline age model |  | *b0* = *y* intercept  *b1* = linear slope of interval  *b2* = linear slope through age 6  *b3* = linear slope between age 6 and 18  *b4* = linear slope between age 18 and 65  *b5* = linear slope between age 65 and 80  *b6* = linear slope after age 80  *b7* = interaction between linear slope of interval and linear slope through age 6  *b8* = interaction between linear slope of interval and linear slope between age 6 and 18  *b9* = interaction between linear slope of interval and linear slope between age 18 and 65  *b10* = interaction between linear slope of interval and linear slope between age 65 and 80  *b11* = interaction between linear slope of interval and linear slope after age 80 |
| Linear interval × exponential age model |  | *b0* = horizontal asymptote  *b1* = linear slope of interval  *b2* = age scaling factor  *b3* = age growth rate  *b4* = interaction between interval and age |
| Quadratic interval × linear age model |  | *b0* = *y* intercept  *b1* = linear slope of interval  *b2* = quadratic slope of interval  *b3* = linear slope of age  *b4* = interaction between linear slope of interval and linear slope of age |
| Quadratic interval × quadratic age model |  | *b0* = *y* intercept  *b1* = linear slope of interval  *b2* = quadratic slope of interval  *b3* = linear slope of age  *b4* = quadratic slope of age  *b5* = interaction between linear slope of interval and linear slope of age |
| Quadratic interval × linear spline age model |  | *b0* = *y* intercept  *b1* = linear slope of interval  *b2* = quadratic slope of interval  *b3* = linear slope through age 6  *b4* = linear slope between age 6 and 18  *b5* = linear slope between age 18 and 65  *b6* = linear slope between age 65 and 80  *b7* = linear slope after age 80  *b8* = interaction between linear slope of interval and linear slope through age 6  *b9* = interaction between linear slope of interval and linear slope between age 6 and 18  *b10* = interaction between linear slope of interval and linear slope between age 18 and 65  *b11* = interaction between linear slope of interval and linear slope between age 65 and 80  *b12* = interaction between linear slope of interval and linear slope after age 80 |
| Quadratic interval × exponential age model |  | *b0* = horizontal asymptote  *b1* = linear slope of interval  *b2* = quadratic slope of interval  *b3* = age scaling factor  *b4* = age growth rate  *b5* = interaction between interval and age |
| Exponential interval × linear age model |  | *b0* = horizontal asymptote  *b1* = interval scaling factor  *b2* = interval growth rate  *b3* = interaction between interval and age  *b4* = linear slope of age |
| Exponential interval × quadratic age model |  | *b0* = horizontal asymptote  *b1* = interval scaling factor  *b2* = interval growth rate  *b3* = interaction between interval and age  *b4* = linear slope of age  *b5* = quadratic slope of age |
| Exponential interval × linear spline age model |  | *b0* = horizontal asymptote  *b1* = interval scaling factor  *b2* = interval growth rate  *b3* = interaction between interval and age through age 6  *b3* = interaction between interval and age between age 6 and 18  *b4* = interaction between interval and age between age 18 and 65  *b5* = interaction between interval and age between age 65 and 80  *b6* = interaction between interval and age after age 80  *b7* = linear slope through age 6  *b8* = linear slope between age 6 and 18  *b9* = linear slope between age 18 and 65  *b10* = linear slope between age 65 and 80  *b11* = linear slope after age 80 |
| Exponential interval × exponential age model |  | *b0* = horizontal asymptote  *b1* = age scaling factor  *b2* = age growth rate  *b3* = interaction between interval and age  *b4* = interval scaling factor  *b5* = interval growth rate |

**Table S6**

*Parameters of Models Testing Linear and Non-Linear Test-Retest Interval and Age Effects that Did not Reach the Best Fit.*

|  | Dataset | Predictor | *ρ* | *df* | *p* | 95% Confidence Interval | *I²* | *τ²* |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **H1: Test-Retest Interval** | | |  |  |  |  |  |  |
| *Linear interval model* | | |  |  |  |  |  |  |
|  | Complete | Intercept (*b0*) | .739 | 189.687 | < .001 | [.721, .756] | 96.064 | .011 |
|  |  | Test-retest interval linear slope (*b1*) | -.002 | 16.297 | < .001 | [-.003, -.001] |  |  |
| *Quadratic interval model* | | |  |  |  |  |  |  |
|  | Complete | Intercept (*b0*) | .733 | 140.591 | < .001 | [.713, .752] | 96.047 | .011 |
|  |  | Test-retest interval linear slope (*b1*) | -.005 | 39.454 | .016 | [-.008, -.001] |  |  |
|  |  | Test-retest interval quadratic slope (*b2*) | .000 | 19.290 | .104 | [.000, .000] |  |  |
| *Linear interval model* | | |  |  |  |  |  |  |
|  | *g* | Intercept (*b0*) | .769 | 135.912 | < .001 | [.747, .790] | 97.055 | .010 |
|  |  | Test-retest interval linear slope (*b1*) | -.003 | 12.238 | < .001 | [-.004, -.002] |  |  |
| *Quadratic interval model* | | |  |  |  |  |  |  |
|  | *g* | Intercept (*b0*) | .758 | 98.851 | < .001 | [.733, .784] | 96.984 | .009 |
|  |  | Test-retest interval linear slope (*b1*) | -.007 | 26.521 | .009 | [-.013, -.002] |  |  |
|  |  | Test-retest interval quadratic slope (*b2*) | .000 | 20.008 | .050 | [.000, .000] |  |  |
| *Quadratic interval model* | | |  |  |  |  |  |  |
|  | Ga | Intercept (*b0*) |  | < 4 |  |  | 89.264 | .012 |
|  |  | Test-retest interval linear slope (*b1*) |  | < 4 |  |  |  |  |
|  |  | Test-retest interval quadratic slope (*b2*) |  | < 4 |  |  |  |  |
| *Exponential interval model* | | |  |  |  |  |  |  |
|  | Ga |  | Model did not converge | | | |  |  |
| *Linear interval model* | | |  |  |  |  |  |  |
|  | Gc | Intercept (*b0*) | .787 | 67.866 | < .001 | [.755, .818] | 95.808 | .005 |
|  |  | Test-retest interval linear slope (*b1*) | -.002 | 6.313 | .178 | [-.005, .001] |  |  |
| *Quadratic interval model* | | |  |  |  |  |  |  |
|  | Gc | Intercept (*b0*) | .765 | 27.467 | < .001 | [.717, .812] | 95.857 | .005 |
|  |  | Test-retest interval linear slope (*b1*) | -.010 | 14.780 | .089 | [-.021, .002] |  |  |
|  |  | Test-retest interval quadratic slope (*b2*) | .000 | 13.923 | .160 | [.000, .001] |  |  |
| *Quadratic interval model* | | |  |  |  |  |  |  |
|  | Gf | Intercept (*b0*) | .707 | 11.906 | < .001 | [.656, .758] | 92.221 | .008 |
|  |  | Test-retest interval linear slope (*b1*) | -.002 | 7.683 | .687 | [-.015, .010] |  |  |
|  |  | Test-retest interval quadratic slope (*b2*) | .000 | 5.669 | .684 | [-.001, .001] |  |  |
| *Exponential interval model* | | |  |  |  |  |  |  |
|  | Gf | Horizontal asymptote (*b0*) | .707 | 4.37 | < .001 | [.567, .847] | 92.354 | .008 |
|  |  | Interval scaling factor (*b1*) |  | < 4 |  |  |  |  |
|  |  | Interval growth rate (*b2*) | .039 |  | .256 |  |  |  |
| *Quadratic interval model* | | |  |  |  |  |  |  |
|  | Gl | Intercept (*b0*) |  | < 4 |  |  | 94.697 | .023 |
|  |  | Test-retest interval linear slope (*b1*) |  | < 4 |  |  |  |  |
|  |  | Test-retest interval quadratic slope (*b2*) |  | < 4 |  |  |  |  |
| *Exponential interval model* | | |  |  |  |  |  |  |
|  | Gl | Horizontal asymptote (*b0*) |  | < 4 |  |  | 96.081 | .028 |
|  |  | Test-retest interval scaling factor (*b1*) |  | < 4 |  |  |  |  |
|  |  | Test-retest interval growth rate (*b2*) | -.134 |  | .521 |  |  |  |
| *Linear interval model* | | |  |  |  |  |  |  |
|  | Gq | Intercept (*b0*) | .755 | 9.08 | < .001 | [.669, .842] | 98.197 | .009 |
|  |  | Test-retest interval linear slope (*b1*) |  | < 4 |  |  |  |  |
| *Exponential interval model* | | |  |  |  |  |  |  |
|  | Gq | Horizontal asymptote (*b0*) |  | < 4 |  |  | 98.016 | .008 |
|  |  | Test-retest interval scaling factor (*b1*) |  | < 4 |  |  |  |  |
|  |  | Test-retest interval growth rate (*b2*) | -.082 |  |  |  |  |  |
| *Quadratic interval model* | | |  |  |  |  |  |  |
|  | Grw | Intercept (*b0*) |  | < 4 |  |  | 96.831 | .006 |
|  |  | Test-retest interval linear slope (*b1*) |  | < 4 |  |  |  |  |
|  |  | Test-retest interval quadratic slope (*b2*) |  | < 4 |  |  |  |  |
| *Exponential interval model* | | |  |  |  |  |  |  |
|  | Grw |  | Model did not converge | | | |  |  |
| *Quadratic interval model* | | |  |  |  |  |  |  |
|  | Gs | Intercept (*b0*) | .736 | 21.41 | < .001 | [.681, .792] | 93.574 | .01 |
|  |  | Test-retest interval linear slope (*b1*) |  | < 4 |  |  |  |  |
|  |  | Test-retest interval quadratic (*b2*) |  | < 4 |  |  |  |  |
| *Exponential interval model* | | |  |  |  |  |  |  |
|  | Gs |  | Model did not converge | | | |  |  |
| *Linear interval model* | | |  |  |  |  |  |  |
|  | Gv | Intercept (*b0*) | .741 | 54.886 | < .001 | [.707, .775] | 92.381 | .012 |
|  |  | Test-retest interval linear slope (*b1*) | -.003 | 4.939 | .060 | [-.007, .000] |  |  |
| *Quadratic interval model* | | |  |  |  |  |  |  |
|  | Gv | Intercept (*b0*) | .719 | 19.950 | < .001 | [.657, .782] | 92.409 | .012 |
|  |  | Test-retest interval linear slope (*b1*) | -.011 | 11.760 | .166 | [-.027, .005] |  |  |
|  |  | Test-retest interval quadratic slope (*b2*) | .000 | 9.544 | .271 | [.000, .001] |  |  |
| *Quadratic interval model* | | |  |  |  |  |  |  |
|  | Gwm | Intercept (*b0*) |  | < 4 |  |  | 91.717 | .014 |
|  |  | Test-retest interval linear slope (*b1*) | .007 | 4.260 | 0.844 | [-.086, .101] |  |  |
|  |  | Test-retest interval quadratic slope (*b2*) | .006 | 9.779 | 0.373 | [-.008, .019] |  |  |
| *Exponential interval model* | | |  |  |  |  |  |  |
|  | Gwm |  | Model did not converge | | | |  |  |
| **H2: Age** | | |  |  |  |  |  |  |
| ***Step 1. Age without additional predictors*** | | | |  |  |  |  |  |
| *Linear age model* | | | |  |  |  |  |  |
|  | complete | Intercept (*b0*) | .735 | 193.466 | < .001 | [.718, .751] | 95.791 | .010 |
|  |  | Age linear slope (*b1*) | .002 | 45.300 | < .001 | [.001, .002] |  |  |
| *Quadratic age model* | | |  |  |  |  |  |  |
|  |  | Intercept (*b0*) | .781 | 69.800 | < .001 | [.758, .803] | 95.296 | .009 |
|  |  | Age linear slope (*b1*) | .005 | 74.628 | < .001 | [.004, .007] |  |  |
|  |  | Age quadratic slope (*b2*) | .000 | 37.630 | < .001 | [.000, .000] |  |  |
| *Linear spline age model* | | |  |  |  |  |  |  |
|  | complete | Intercept (*b0*) | 1.316 | 29.336 | < .001 | [1.026, 1.605] | 94.634 | .009 |
|  |  | Linear spline 1 (*b1*) | .043 | 25.320 | < .001 | [.024, .063] |  |  |
|  |  | Linear spline 2 (*b2*) | .008 | 82.236 | .001 | [.003, .013] |  |  |
|  |  | Linear spline 3 (*b3*) | .000 | 44.651 | .765 | [-.002, .001] |  |  |
|  |  | Linear spline 4 (*b4*) | .000 | 11.249 | 0.939 | [-.008, .009] |  |  |
|  |  | Linear spline 5 (*b5*) |  | < 4 |  |  |  |  |
| *Linear age model* | | |  |  |  |  |  |  |
|  | *g* | Intercept (*b0*) | .773 | 104.012 | < .001 | [.752, .793] | 97.274 | .011 |
|  |  | Age linear slope (*b1*) | .003 | 19.255 | < .001 | [.001, .004] |  |  |
| *Quadratic age model* | | |  |  |  |  |  |  |
|  | *g* | Intercept (*b0*) | .839 | 44.438 | < .001 | [.806, .872] | 97.089 | .010 |
|  |  | Age linear slope (*b1*) | .007 | 51.276 | < .001 | [.005, .009] |  |  |
|  |  | Age quadratic slope (*b2*) | .000 | 33.385 | < .001 | [.000, .000] |  |  |
| *Linear spline age model* | | |  |  |  |  |  |  |
|  | *g* | Intercept (*b0*) | 1.503 | 28.372 | < .001 | [1.211, 1.795] | 96.242 | .008 |
|  |  | Linear spline 1 (*b1*) | .054 | 24.312 | < .001 | [.034, .074] |  |  |
|  |  | Linear spline 2 (*b2*) | .008 | 57.567 | .002 | [.003, .013] |  |  |
|  |  | Linear spline 3 (*b3*) | -.001 | 18.246 | .436 | [-.002, .001] |  |  |
|  |  | Linear spline 4 (*b4*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 5 (*b5*) |  | < 4 |  |  |  |  |
| *Quadratic age model* | | |  |  |  |  |  |  |
|  | Ga |  | Model did not converge | | | |  |  |
| *Linear spline age model* | | |  |  |  |  |  |  |
|  | Ga |  | Model did not converge | | | |  |  |
| *Exponential age model* | | |  |  |  |  |  |  |
|  | Ga |  | Model did not converge | | | |  |  |
| *Linear age model* | | |  |  |  |  |  |  |
|  | Gc | Intercept (*b0*) | .772 | 59.333 | < .001 | [.739, .805] | 95.450 | .005 |
|  |  | Age linear slope (*b1*) | .002 | 25.612 | .006 | [.001, .003] |  |  |
| *Quadratic age model* | | |  |  |  |  |  |  |
|  | Gc | Intercept (*b0*) | .813 | 35.513 | < .001 | [.779, .846] | 95.150 | .005 |
|  |  | Age linear slope (*b1*) | .006 | 33.357 | < .001 | [.003, .009] |  |  |
|  |  | Age quadratic slope (*b2*) | .000 | 16.119 | .003 | [.000, .000] |  |  |
| *Linear spline age model* | | |  |  |  |  |  |  |
|  | Gc | Intercept (*b0*) | 2.366 | 4.216 | .004 | [1.208, 3.524] | 94.599 | .005 |
|  |  | Linear spline 1 (*b1*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 2 (*b2*) | .013 | 36.109 | .006 | [.004, .022] |  |  |
|  |  | Linear spline 3 (*b3*) | .000 | 23.552 | .789 | [-.002, .002] |  |  |
|  |  | Linear spline 4 (*b4*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 5 (*b5*) |  | < 4 |  |  |  |  |
| *Linear age model* | | |  |  |  |  |  |  |
|  | Gf | Intercept (*b0*) | .696 | 42.752 | < .001 | [.663, .728] | 91.690 | .008 |
|  |  | Age linear slope (*b1*) | .002 | 27.967 | < .001 | [.001, .003] |  |  |
| *Quadratic age model* | | |  |  |  |  |  |  |
|  | Gf | Intercept (*b0*) | .720 | 27.660 | < .001 | [.680, .761] | 90.655 | .007 |
|  |  | Age linear slope (*b1*) | .004 | 22.529 | .002 | [.002, .007] |  |  |
|  |  | Age quadratic slope (*b2*) | .000 | 12.946 | .061 | [.000, .000] |  |  |
| *Linear spline age model* | | |  |  |  |  |  |  |
|  | Gf | Intercept (*b0*) | 1.044 | 8.035 | .076 | [-.137, 2.226] | 90.820 | .007 |
|  |  | Linear spline 1 (*b1*) | .029 | 7.277 | .444 | [-.055, .113] |  |  |
|  |  | Linear spline 2 (*b2*) | .009 | 23.079 | .112 | [-.002, .019] |  |  |
|  |  | Linear spline 3 (*b3*) | .001 | 21.282 | 0.308 | [-.001, .004] |  |  |
|  |  | Linear spline 4 (*b4*) | -.005 | 8.649 | 0.125 | [-.013, .002] |  |  |
|  |  | Linear spline 5 (*b5*) | .015 | 5.048 | 0.011 | [.005, .024] |  |  |
| *Quadratic age model* | | |  |  |  |  |  |  |
|  | Gl | Intercept (*b0*) | .655 | 4.137 | < .001 | [.553, .757] | 90.836 | .015 |
|  |  | Age linear slope (*b1*) | .002 | 4.217 | .402 | [-.004, .007] |  |  |
|  |  | Age quadratic slope (*b2*) |  | < 4 |  |  |  |  |
| *Linear spline age model* | | |  |  |  |  |  |  |
|  | Gl | Intercept (*b0*) |  | < 4 |  |  | 77.551 | .006 |
|  |  | Linear spline 1 (*b1*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 2 (*b2*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 3 (*b3*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 4 (*b4*) |  | < 4 |  |  |  |  |
| *Exponential age model* | | |  |  |  |  |  |  |
|  | Gl |  | Model did not converge | | | |  |  |
| *Quadratic age model* | | |  |  |  |  |  |  |
|  | Gq | Intercept (*b0*) |  | < 4 |  |  | 94.021 | .007 |
|  |  | Age linear slope (*b1*) | .004 | 5.53 | .356 | [-.006, .013] |  |  |
|  |  | Age quadratic slope (*b2*) | .000 | 5.24 | .876 | [0, 0] |  |  |
| *Linear spline age model* | | |  |  |  |  |  |  |
|  | Gq | Intercept (*b0*) |  | < 4 |  |  | 93.15 | .007 |
|  |  | Linear spline 1 (*b1*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 2 (*b2*) | -.004 | 4.7 | .729 | [-.030, .023] |  |  |
|  |  | Linear spline 3 (*b3*) | .004 | 2.55 | .239 |  |  |  |
|  |  | Linear spline 4 (*b5*) |  | < 4 |  |  |  |  |
| *Exponential age model* | | |  |  |  |  |  |  |
|  | Gq | Horizontal asymptote (*b0*) |  | < 4 |  |  | 93.811 | .006 |
|  |  | Age scaling factor (*b1*) | .258 | 5.16 | .039 | [.020, .496] |  |  |
|  |  | Age growth rate (*b2*) | -.015 |  |  |  |  |  |
| *Linear age model* | | |  |  |  |  |  |  |
|  | Grw | Intercept (*b0*) |  | < 4 |  |  | 97.84 | .015 |
|  |  | Age linear slope (*b1*) |  | < 4 |  |  |  |  |
| *Quadratic age model* | | |  |  |  |  |  |  |
|  | Grw | Intercept (*b0*) |  | < 4 |  |  | 98.244 | .023 |
|  |  | Age linear slope (*b1*) |  | < 4 |  |  |  |  |
|  |  | Age quadratic slope (*b2*) |  | < 4 |  |  |  |  |
| *Exponential age model* | | |  |  |  |  |  |  |
|  | Grw |  | Model did not converge | | | |  |  |
| *Linear age model* | | |  |  |  |  |  |  |
|  | Gs | Intercept (*b0*) | .699 | 16.3 | < .001 | [.632, .766] | 91.217 | .007 |
|  |  | Age linear slope (*b1*) | .003 | 14.00 | .010 | [.001, .005] |  |  |
| *Quadratic age model* | | |  |  |  |  |  |  |
|  |  | Intercept (*b0*) | .747 | 15.96 | < .001 | [.702, .791] |  |  |
|  |  | Age linear slope (*b1*) | .008 | 14.84 | .002 | [.004, .013] |  |  |
|  |  | Age quadratic slope (*b2*) | .000 | 6.49 | .018 | [.000, .000] |  |  |
| *Linear spline age model* | | |  |  |  |  |  |  |
|  | Gs | Intercept (*b0*) |  | < 4 |  |  | 76.731 | .002 |
|  |  | Linear spline 1 (*b1*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 2 (*b2*) | .014 | 8.84 | .001 | [.008, .020] |  |  |
|  |  | Linear spline 3 (*b3*) | .001 | 8.48 | .311 | [-.001, .002] |  |  |
|  |  | Linear spline 4 (*b4*) | -.012 | 4.47 | .104 | [-.027, .004] |  |  |
|  |  | Linear spline 5 (*b5*) | .013 | 4.72 | .258 | [-.014, .041] |  |  |
| *Linear age model* | | |  |  |  |  |  |  |
|  | Gv | Intercept (*b0*) | .727 | 51.471 | < .001 | [.692, .763] | 92.341 | .012 |
|  |  | Age linear slope (*b1*) | .002 | 17.440 | .006 | [.001, .003] |  |  |
| *Quadratic age model* | | |  |  |  |  |  |  |
|  | Gv | Intercept (*b0*) | .759 | 24.313 | < .001 | [.716, .803] | 91.681 | .011 |
|  |  | Age linear slope (*b1*) | .005 | 25.702 | .008 | [.001, .008] |  |  |
|  |  | Age quadratic slope (*b2*) | .000 | 13.073 | .057 | [.000, .000] |  |  |
| *Linear spline age model* | | |  |  |  |  |  |  |
|  |  | Intercept (*b0*) |  | < 4 |  |  | 91.221 | .011 |
|  |  | Linear spline 1 (*b1*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 2 (*b2*) | .006 | 29.260 | .180 | [-.003, .016] |  |  |
|  |  | Linear spline 3 (*b3*) | .000 | 15.889 | .927 | [-.003, .003] |  |  |
|  |  | Linear spline 4 (*b4*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 5 (*b5*) |  | < 4 |  |  |  |  |
| *Linear age model* | | |  |  |  |  |  |  |
|  | Gwm | Intercept (*b0*) | .663 | 16.552 | < .001 | [.590, .736] | 91.569 | .014 |
|  |  | Age linear slope (*b1*) | .002 | 9.284 | .051 | [.000, .004] |  |  |
| *Age quadratic model* | | |  |  |  |  |  |  |
|  | Gwm | Intercept (*b0*) | .706 | 11.000 | < .001 | [.641, .771] | 89.677 | .011 |
|  |  | Age linear slope (*b1*) | .006 | 11.831 | .021 | [.001, .011] |  |  |
|  |  | Age quadratic slope (*b2*) | .000 | 4.984 | .099 | [.000, .000] |  |  |
| *Linear spline age model* | | |  |  |  |  |  |  |
|  | Gwm | Intercept (*b0*) |  | < 4 |  |  | 88.926 | .011 |
|  |  | Linear spline 1 (*b1*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 2 (*b2*) | .012 | 9.519 | .098 | [-.003, .027] |  |  |
|  |  | Linear spline 3 (*b3*) | -.001 | 7.149 | .785 | [-.005, .004] |  |  |
|  |  | Linear spline 4 (*b4*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 5 (*b5*) |  | < 4 |  |  |  |  |
| ***Step 3. Test-Retest Interval, Age, and Interval-Age Interaction***  ***Step 2. Test-Retest Interval and Age Interaction*** | | | | |  |  |  |  |
| *Exponential interval and exponential age model* | | | | |  |  |  |  |
|  | Complete | Horizontal asymptote (*b0*) | .716 | 47.024 | < .001 | [.683, .749] | 93.710 | .007 |
|  |  | Test-retest interval scaling factor (*b1*) | -.059 | 78.241 | < .001 | [-.080, -.038] |  |  |
|  |  | Test-retest interval growth rate (*b2*) | -.158 |  | .065 |  |  |  |
|  |  | Age scaling factor (*b3*) | .006 | 47.778 | < .001 | [.005, .007] |  |  |
|  |  | Age growth rate (*b4*) | -.211 |  | < .001 |  |  |  |
| *Exponential interval, exponential age, and interval-age interaction* | | | | |  |  |  |  |
|  | *g* | Horizontal asymptote (*b0*) | .752 | 31.226 | < .001 | [.712, .792] | 93.146 | .004 |
|  |  | Age scaling factor (*b1*) | .004 | 33.163 | < .001 | [.003, .004] |  |  |
|  |  | Age growth rate (*b2*) | -.247 |  | < .001 |  |  |  |
|  |  | Interval-age-interaction (*b3*) | -.002 |  | .001 |  |  |  |
|  |  | Test-retest interval scaling factor (*b4*) | -.065 | 49.062 | < .001 | [-.087, -.043] |  |  |
|  |  | Test-retest interval growth rate (*b5*) | -.164 |  | .013 |  |  |  |
| *Linear interval, linear age, and interval-age interaction* | | | | | |  |  |  |
|  | Ga | Intercept (*b0*) |  | < 4 |  |  | 91.941 | .018 |
|  |  | Interval linear slope (*b1*) |  | < 4 |  |  |  |  |
|  |  | Age linear slope (*b2*) |  | < 4 |  |  |  |  |
|  |  | Interval-age-interaction (*b3*) |  | < 4 |  |  |  |  |
| *Exponential interval, exponential age, and interval-age interaction* | | | | | |  |  |  |
|  | Gc | Horizontal asymptote (*b0*) | .785 | 24.274 | < .001 | [.743, .828] | 92.650 | .003 |
|  |  | Age scaling factor (*b1*) | .004 | 14.016 | < .001 | [.003, .005] |  |  |
|  |  | Age growth rate (*b2*) | -.283 |  | < .001 |  |  |  |
|  |  | Interval-age-interaction (*b3*) | -.001 |  | .003 |  |  |  |
|  |  | Test-retest interval scaling factor (*b4*) | -.030 | 37.842 | < .001 | [-.044, -.017] |  |  |
|  |  | Test-retest interval growth rate (*b5*) | -.297 |  | .109 |  |  |  |
| *Linear interval, exponential age, and interval-age interaction* | | | | | |  |  |  |
|  | Gf | Horizontal asymptote (*b0*) | .776 | 30.103 | < .001 | [.742, .811] | 90.101 | .007 |
|  |  | Interval linear slope (*b1*) |  | < 4 |  |  |  |  |
|  |  | Age scaling factor (*b2*) | .028 | 27.081 | < .001 | [.015, .041] |  |  |
|  |  | Age growth rate (*b3*) | -.122 |  | .026 |  |  |  |
|  |  | Interval-age-interaction (*b4*) | -.002 |  | < .001 |  |  |  |
| *Linear interval, exponential age, and interval-age interaction* | | | | | |  |  |  |
|  | Gl | Intercept (*b0*) |  | < 4 |  |  | 88.639 | .013 |
|  |  | Interval linear slope (*b1*) |  | < 4 |  |  |  |  |
|  |  | Age linear slope (*b2*) |  | < 4 |  |  |  |  |
|  |  | Interval-age-interaction (*b3*) |  | < 4 |  |  |  |  |
| *Quadratic interval, linear age, and interval-age interaction* | | | | | |  |  |  |
|  | Gq | Intercept (*b0*) |  | < 4 |  |  | 90.025 | .005 |
|  |  | Interval linear slope (*b1*) |  | < 4 |  |  |  |  |
|  |  | Interval quadratic slope (*b2*) |  | < 4 |  |  |  |  |
|  |  | Age linear slope (*b3*) |  | < 4 |  |  |  |  |
|  |  | Interval-age-interaction (*b4*) |  | < 4 |  |  |  |  |
| *Linear interval, linear spline age, and interval-age interaction* | | | | | |  |  |  |
|  | Grw | Intercept (*b0*) |  | < 4 |  |  |  |  |
|  |  | Interval linear slope (*b1*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 1 (*b2*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 2 (*b3*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 3 (*b4*) |  | < 4 |  |  |  |  |
|  |  | Linear spline 4 (*b5*) |  | < 4 |  |  |  |  |
| *Exponential interval, exponential age, and interval-age interaction* | | | | | |  |  |  |
|  | Gv |  | Model did not converge | | | |  |  |
| *Linear interval, exponential age, and interval-age interaction* | | | | | |  |  |  |
|  | Gwm | Intercept (*b0*) | .713 | 4.625 | < .001 | [.644, .782] | 86.247 | .008 |
|  |  | Interval linear slope (*b1*) | -.023 | 7.821 | .110 | [-.052, .006] |  |  |
|  |  | Age growth rate (*b2*) | .037 | 9.570 | .013 | [.010, .064] |  |  |
|  |  | Age scaling factor (*b3*) | -.122 |  | .027 |  |  |  |
|  |  | Interval-age-interaction (*b4*) | -.002 |  | < .001 |  |  |  |

*Note.* Complete = Complete dataset including *g* and CHC broad abilities. As we subtracted 5 from the test-retest interval, the intercepts in models including test-retest interval represented a 5-year interval instead of a 0-year interval. As we subtracted 20 from the age, the intercepts in models including age represented a 20-year age instead of a 0-year age. Because of this, the intercepts in models including five linear spline predictors represents a 20-year age instead (because 20 years were added to the intercept for each linear spline predictor).

**Table S7**

*Model Fit Indices of Models Testing Linear and Non-Linear Test-Retest Interval and Age Effects in a Subsample of Children and Adolescents.*

|  | **Dataset** | | **Model** | **LL** | **SCF** | **AIC** | **BIC** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **H1: Test-retest interval** | | | | |  |  |  |
|  | | Complete | Linear interval model | -6775.405 | 13.207 | 13564.810 | 13599.123 |
|  | | Complete | Quadratic interval model | -6773.039 | 11.716 | 13562.079 | 13601.292 |
|  | | **Complete** | **Exponential interval model** | **-6764.997** | **11.674** | **13545.994** | **13585.208** |
| **H2a: Age** | | | |  |  |  |  |
| ***Step 1. Age without additional predictors*** | | | |  |  |  |  |
|  | | Complete | Linear age model | -7402.816 | 10.894 | 14827.633 | 14881.552 |
|  | | Complete | Quadratic age model | -7400.525 | 10.064 | 14825.050 | 14883.870 |
|  | | **Complete** | **Exponential age model** | **-7399.514** | **10.111** | **14823.029** | **14881.850** |
| ***Step 2 and 3. Test-retest interval and age and their interaction*** | | | | |  |  |  |
|  | | **Complete** | **Exponential interval + Exponential age model** | **-9795.789** | **9.776** | **19619.578** | **19688.202** |
|  | | Complete | Exponential interval × Exponential age model | -9792.965 | 9.080 | 19615.931 | 19689.457 |

*Note.* All models were conducted in Mplus based on the subsample of preschool children and school-aged children and adolescents. Best fitting models are written in bold.

**Table S8**

*Model Fit Indices of Models Testing Linear and Non-Linear Test-Retest Interval and Age Effects Based on a Subsample of Latent Correlations.*

|  | **Dataset** | | **Model** | **LL** | **SCF** | **AIC** | **BIC** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **H1: Test-retest interval** | | | | |  |  |  |
|  | | **Latent** | **Linear interval model** | **-244.936** | **4.175** | **503.871** | **517.255** |
|  | | Latent | Quadratic interval model | -244.649 | 3.637 | 505.297 | 520.593 |
|  | | Latent | Exponential interval model | -244.479 | 3.604 | 504.959 | 520.255 |
| **H2a: Age** | | | |  |  |  |  |
| ***Step 1. Age without additional predictors*** | | | |  |  |  |  |
|  | | **Latent** | **Linear age model** | **-468.321** | **6.076** | **980.642** | **1022.706** |
|  | | Latent | Quadratic age model | -468.321 | 5.814 | 982.642 | 1026.618 |
|  | | Latent | Linear spline age model | -467.924 | 5.334 | 985.848 | 1033.649 |
|  | | Latent | Exponential age model | Model did not converge | | |  |
| ***Step 2 and 3. Test-retest interval and age and their interaction*** | | | | |  |  |  |
|  | | **Latent** | **Linear interval + linear age** | **-455.898** | **4.888** | **935.796** | **958.740** |
|  | | Latent | Linear interval × linear age | -455.845 | 4.512 | 937.690 | 962.547 |

*Note.* All models were conducted in Mplus based on the subsample of 44 latent correlation effect sizes. Best fitting models are written in bold.

**Table S9**

*Moderator Analyses of Rank-Order Stability in Cognitive Ability Based on Latent Correlations.*

|  | Dataset | Predictor | Reference category | *ρ* | *df* | *p* | 95% Confidence Interval | *I²* | *τ²* |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **H1: Test-Retest Interval** | | | |  |  |  |  |  |  |
|  | Latent | Intercept | | .794 | 3.74 | < .001 | [.636, .951] | 98.904 | .025 |
|  |  | Test-retest interval linear slope | | .019 | 2.36 | .261 | [-.029, .067] |  |  |
| **H2: Age**. | | |  |  |  |  |  |  |  |
| ***Step 1. Age without additional predictors.*** | | | | | |  |  |  |  |
|  | Latent | Intercept | | .725 | 1.31 | .046 | [.040, 1.410] | 98.832 | .030 |
|  |  | Age linear slope | | .003 | 2.25 | .222 | [-.005, .012] |  |  |
| ***Step2. Test-Retest Interval and Age*** | | | |  |  |  |  |  |  |
|  | Latent | Intercept | | .732 | 1.750 | .021 | [.294, 1.169] | 98.924 | .032 |
|  |  | Test-retest interval linear slope | | .005 | 1.750 | .491 | [-.022, .031] |  |  |
|  |  | Age linear slope | | .003 | 2.60 | .219 | [-.003, .009] |  |  |

*Note.* All models were conducted based on the subsample of 44 latent correlation effect sizes.

**Table S10**

*Robustness Checks for the Magnitude of Rank-Order Stability Analyses in Cognitive Ability*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Dataset | Predictor | *ρ* | *df* | *p* | 95% Confidence Interval | *I²* | *τ²* |
| **Robustness Check 1. Magnitude of *ρ* Without Controlling for Test-Retest Interval and Age** | | | | | | | |  |
|  | Complete | Intercept | .736 | 194.389 | < .001 | [.718, .753] | 96.102 | .011 |
|  | G | Intercept | .763 | 142.265 | < .001 | [.741, .785] | 97.333 | .010 |
|  | Ga | Intercept | .639 | 3.987 | < .001 | [.526, .752] | 85.081 | .009 |
|  | Gc | Intercept | .785 | 69.160 | < .001 | [.754, .816] | 96.102 | .005 |
|  | Gf | Intercept | .716 | 55.925 | < .001 | [.686, .746] | 92.737 | .008 |
|  | Gl | Intercept | .680 | 6.988 | < .001 | [.579, .781] | 96.270 | .029 |
|  | Gq | Intercept | .746 | 10.542 | < .001 | [.659, .833] | 98.158 | .009 |
|  | Grw | Intercept | .768 | 5.882 | < .001 | [.595, .941] | 97.596 | .009 |
|  | Gs | Intercept | .736 | 24.291 | < .001 | [.680, .792] | 93.328 | .010 |
|  | Gv | Intercept | .737 | 56.654 | < .001 | [.701, .772] | 93.037 | .013 |
|  | Gwm | Intercept | .681 | 21.306 | < .001 | [.618, .745] | 92.425 | .015 |
| **Robustness Check 2. Magnitude of *ρ* After Deleting Influential Outlier Effect Sizes** | | | | | | | |  |
|  | Complete | Intercept | .762 | 197.653 | < .001 | [.748, .776] | 98.659 | .015 |
|  | G | Intercept | .802 | 142.916 | < .001 | [.786, .817] | 98.736 | .010 |
|  | Ga | Intercept | .651 | 3.996 | < .001 | [.512, .789] | 90.373 | .013 |
|  | Gc | Intercept | .791 | 67.290 | < .001 | [.766, .816] | 94.154 | .003 |
|  | Gf | Intercept | .708 | 56.745 | < .001 | [.680, .735] | 95.602 | .012 |
|  | Gl | Intercept | .688 | 6.990 | < .001 | [.591, .786] | 95.529 | .025 |
|  | Gq | Intercept | .770 | 10.005 | < .001 | [.711, .829] | 93.647 | .004 |
|  | Grw | Intercept | .776 | 5.897 | < .001 | [.636, .915] | 96.280 | .008 |
|  | Gs | Intercept | .738 | 24.129 | < .001 | [.695, .781] | 91.977 | .008 |
|  | Gv | Intercept | .747 | 55.570 | < .001 | [.719, .775] | 90.031 | .009 |
|  | Gwm | Intercept | .688 | 20.835 | < .001 | [.638, .739] | 87.102 | .009 |
| **Robustness Check 3. Magnitude of *ρ* After Deleting Effect Sizes Causing Asymmetry** | | | | | | | |  |
|  | Complete | Intercept | .764 | 186.775 | < .001 | [.750, .778] | 95.056 | .006 |
|  | G | Intercept | .801 | 135.815 | < .001 | [.787, .816] | 96.343 | .006 |

*Note.* Robustness check 1was conducted based on effect sizes that were not residualized by *test-retest* and *age* effects. Robustness check 2 was conducted after influential outlier effect sizes were deleted from the datasets. Complete = Complete dataset including G and all Stratum II abilities.

**Figure S1**

*Funnel Plots Based on Fishers’ z Effect Sizes.*

*Ein Bild, das Text, Screenshot, Diagramm, Design enthält.

Automatisch generierte Beschreibung*

*Notes.* Funnel plots were conducted based on aggregated effect sizes from same studies. Prior to the analyses, test-retest and age effects were residualized out.

**Figure S2**

*Trim-and-Fill Plots Based on Fishers’ z Effect Sizes.*

*Ein Bild, das Text, Screenshot, Diagramm, Design enthält.

Automatisch generierte Beschreibung*

*Notes.* Funnel plots were conducted based on aggregated effect sizes from same studies. Prior to the analyses, test-retest and age effects were residualized out.

**Figure S3**

*Funnel Plots Based on r Effect Sizes*

*Ein Bild, das Text, Diagramm, Screenshot, Origami enthält.

Automatisch generierte Beschreibung*

*Notes.* Funnel plots were conducted based on aggregated effect sizes from the same studies. Prior to the analyses, test-retest and age effects were residualized out.

**Figure S4**

*Trim-and-Fill Plots Based on r Effect Sizes.*

*Ein Bild, das Text, Diagramm, Design enthält.

Automatisch generierte Beschreibung*

*Notes.* Trim-and-fill plots were conducted based on aggregated effect sizes from the same studies. Prior to the analyses, test-retest and age effects were residualized out.

**Figure S5**

*Best Fitting Test-Retest Interval Duration Moderation Curves for all Abilities.*

*Ein Bild, das Text, Diagramm, Reihe, Karte enthält.

Automatisch generierte Beschreibung*

**Figure S6**

*Best Fitting Age Moderation Curves for all Abilities.*

Ein Bild, das Text, Diagramm, Reihe, parallel enthält.

Automatisch generierte Beschreibung

# List of Studies Included in the Meta-Analysis

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