BISR: grip (focus)

Date: 2017-01-27

## Legend

* Corr(Levels)Est = correlation between intercepts (factor scores) of two processes
* Corr(Slopes)Est = correlation between linear slopes (factor scores) of two processes
* Corr(Resid)Est = correlation between residuals of two processes

Correlations have been computed withing Mplus.

Note: cases in which restricted (co)variances or insufficient decimals prevent the computation of correlations are marked by ---

**Correlations** are reported in the form : **est(se) pval star**  
where  
- est is the covariance estimate on the original metric  
- se is the standard error on the original metric  
- pval is the p-value associated with the raw covariance  
- star is significance indicator associated with corresponding covariance estimate, with ., \*, \*\*, and \*\*\* indicating significance at .10, .05, .01, and .001 alpha levels, respectively

# Group by domain

## male

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| domain | study | physical | cognitive |  | Corr(Levels)Est | Corr(Slopes)Est | Corr(Residuals)Est |
| attention | hrs | grip | serial7 | 3288 | .15( .04), <.01 \*\*\* | .30( .11), =.01 \*\* | -.04( .03), =.17 |
| attention | map | grip | digit\_f | 321 | .08( .08), =.28 | .25( .51), =.62 | .01( .05), =.88 |
| attention | octo | grip | digit\_f | 139 | -.15( .13), =.25 | .24( .38), =.52 | -.07( .07), =.32 |
| attention | satsa | grip | digit\_f | 299 | .19( .12), =.12 | .40( .77), =.60 | .04( .05), =.49 |
| episodic memory | eas | grip | logic\_tot | 217 | -.12( .26), =.66 | .03( .49), =.95 | .13( .11), =.24 |
| episodic memory | elsa | grip | word\_de | 3045 | .04( .04), =.27 | -.51( .40), =.21 | .03( .02), =.22 |
| episodic memory | hrs | grip | word\_de | 3290 | .15( .03), <.01 \*\*\* | .28( .35), =.42 | .03( .02), =.22 |
| episodic memory | map | grip | bstory\_de | 321 | .10( .09), =.30 | -.55( .51), =.28 | .04( .05), =.34 |
| episodic memory | map | grip | logic\_de | 321 | -.06( .08), =.49 | -.07( .23), =.77 | .04( .04), =.32 |
| episodic memory | map | grip | word\_de | 321 | -.02( .07), =.73 | -.12( .42), =.78 | -.02( .04), =.71 |
| episodic memory | map | grip | word\_rec | 321 | .06( .07), =.38 | .11( .21), =.60 | -.02( .06), =.76 |
| episodic memory | octo | grip | mir | 139 | .36( .15), =.01 \* | .56( .28), =.05 \* | .01( .09), =.93 |
| episodic memory | octo | grip | mir\_recog | 139 | .09( .16), =.60 | -.34( .40), =.39 | .03( .05), =.57 |
| executive function | eas | grip | trailsb | 221 | .23( .33), =.49 | -.37( .81), =.65 | -.03( .16), =.85 |
| fluency | eas | grip | categories | 222 | .07( .26), =.80 | .87( .55), =.11 | -.12( .13), =.37 |
| fluency | eas | grip | fas | 222 | -.04( .19), =.85 | .66(1.21), =.58 | -.08( .12), =.51 |
| fluency | ilse | grip | fluency | 252 | .07( .10), =.47 | .19( .76), =.80 | .21( .07), <.01 \*\* |
| fluency | map | grip | categories | 321 | .01( .07), =.86 | .25( .28), =.36 | -.04( .05), =.46 |
| fluid reasoning | eas | grip | block | 210 | .08( .29), =.77 | .64(1.24), =.60 | .00( .12), =.98 |
| fluid reasoning | ilse | grip | spatial\_ab | 252 | .18( .10), =.06 . | .41( .33), =.21 | -.04( .07), =.54 |
| fluid reasoning | lasa | grip | raven | 800 | .17( .05), <.01 \*\* | .93( .69), =.18 | .07( .03), =.02 \* |
| fluid reasoning | map | grip | matrices | 308 | .06( .08), =.45 | .75( .12), <.01 \*\*\* | -.02( .05), =.71 |
| fluid reasoning | octo | grip | block | 139 | .30( .08), <.01 \*\*\* | -.25(1.09), =.82 | .14( .06), =.03 \* |
| fluid reasoning | octo | grip | fig\_logic | 138 | .57( .15), <.01 \*\*\* | .74(1.78), =.68 | -.05( .07), =.43 |
| fluid reasoning | satsa | grip | analogies | 299 | .13( .11), =.27 | .69( .53), =.19 | .17( .05), <.01 \*\*\* |
| fluid reasoning | satsa | grip | block | 298 | .40( .09), <.01 \*\*\* | .79( .44), =.07 . | .14( .05), <.01 \*\* |
| fluid reasoning | satsa | grip | rotate | 299 | .36( .09), <.01 \*\*\* | -.13( .55), =.81 | .10( .05), =.05 . |
| mental status | eas | grip | mmse | 222 | -.02( .50), =.97 | -.33(2.08), =.88 | .09( .13), =.50 |
| mental status | map | grip | mmse | 321 | .17( .07), =.01 \* | .69( .23), <.01 \*\* | .00( .05), =.98 |
| mental status | nuage | grip | mmms | 847 | .13( .05), =.01 \*\* | .28( .21), =.19 | -.04( .02), =.13 |
| mental status | nuage | grip | mmse | 847 | .18( .06), <.01 \*\* | .30( .25), =.23 | .00( .03), =.92 |
| mental status | octo | grip | clock | 139 | .26( .17), =.14 | .30( .42), =.48 | .14( .10), =.14 |
| mental status | octo | grip | mmse | 140 | .32( .18), =.07 . | -.11( .34), =.75 | .15( .08), =.06 . |
| mental status | satsa | grip | mmse | 299 | .27( .13), =.04 \* | .34( .30), =.27 | .13( .05), =.01 \*\* |
| perceptual speed | eas | grip | symbol | 221 | -.11( .29), =.71 | .92( .50), =.07 . | .02( .12), =.87 |
| perceptual speed | ilse | grip | symbol | 252 | -.08( .10), =.41 | -.07( .36), =.85 | .06( .08), =.40 |
| perceptual speed | lasa | grip | letter | 800 | .10( .05), =.05 \* | .61( .41), =.13 | .09( .03), =.01 \* |
| perceptual speed | map | grip | num\_comp | 321 | .04( .07), =.58 | -.21( .35), =.54 | .03( .04), =.47 |
| perceptual speed | map | grip | symbol | 321 | .13( .07), =.07 . | .49( .32), =.13 | -.01( .04), =.83 |
| perceptual speed | octo | grip | psif | 138 | .11( .17), =.49 | -.08( .64), =.90 | .12( .12), =.32 |
| perceptual speed | octo | grip | symbol | 138 | .24( .10), =.02 \* | -.08( .47), =.87 | .15( .08), =.05 . |
| perceptual speed | satsa | grip | symbol | 299 | .32( .09), <.01 \*\*\* | .04( .44), =.92 | .16( .05), <.01 \*\*\* |
| semantic memory | eas | grip | bnt | 222 | -.11( .38), =.77 | -.18(1.82), =.92 | -.06( .12), =.64 |
| semantic memory | eas | grip | waisvocab | 222 | .12( .34), =.73 | -.02(1.37), =.99 | -.13( .14), =.37 |
| semantic memory | ilse | grip | waisgeneral | 252 | .12( .11), =.25 | .23(1.11), =.83 | -.04( .08), =.65 |
| semantic memory | map | grip | bnt | 321 | .19( .05), <.01 \*\*\* | .73( .18), <.01 \*\*\* | .03( .04), =.42 |
| semantic memory | map | grip | nart | 321 | .12( .06), =.06 . | .38( .33), =.25 | -.03( .06), =.59 |
| semantic memory | octo | grip | information | 140 | .05( .11), =.66 | -.46( .32), =.16 | .18( .08), =.03 \* |
| semantic memory | octo | grip | synonyms | 139 | .08( .10), =.41 | -.14( .72), =.85 | .15( .08), =.06 . |
| semantic memory | satsa | grip | information | 410 | .10( .10), =.28 | .65( .25), =.01 \*\* | .05( .04), =.13 |
| semantic memory | satsa | grip | synonyms | 299 | .19( .10), =.05 . | -.42( .51), =.41 | .01( .05), =.79 |
| short-term memory | eas | grip | digit\_tot | 222 | .04( .25), =.86 | .28( .90), =.75 | .02( .11), =.86 |
| short-term memory | eas | grip | word\_im | 222 | -.26( .31), =.41 | .39( .61), =.53 | .07( .12), =.54 |
| short-term memory | elsa | grip | word\_im | 3043 | .02( .04), =.58 | -.44( .34), =.20 | .06( .02), =.01 \* |
| short-term memory | hrs | grip | word\_im | 3290 | .14( .03), <.01 \*\*\* | .08( .40), =.84 | .06( .02), =.01 \* |
| short-term memory | lasa | grip | word\_im | 800 | .07( .06), =.25 | .16( .80), =.84 | .14( .03), <.01 \*\*\* |
| short-term memory | map | grip | bstory\_im | 321 | .14( .10), =.16 | -.03( .64), =.96 | .01( .04), =.85 |
| short-term memory | map | grip | logic\_im | 321 | -.12( .09), =.17 | -.48( .38), =.22 | .04( .05), =.40 |
| short-term memory | map | grip | word\_im | 321 | -.01( .08), =.93 | -.34( .38), =.38 | .07( .05), =.16 |
| short-term memory | octo | grip | prose\_im | 139 | .35( .11), <.01 \*\*\* | -.38(2.59), =.88 | .14( .10), =.16 |
| short-term memory | satsa | grip | fig\_mem | 299 | .24( .12), =.04 \* | .50( .50), =.32 | .12( .05), =.02 \* |
| verbal comprehension | map | grip | ideas | 321 | .16( .05), <.01 \*\*\* | .10( .15), =.51 | -.05( .03), =.13 |
| visual discrimination | ilse | grip | piccomp | 252 | .22( .12), =.06 . | .43( .48), =.37 | .16( .09), =.09 . |
| visual discrimination | map | grip | line | 321 | .06( .07), =.41 | -.18( .42), =.68 | -.03( .05), =.60 |
| working memory | map | grip | digit\_b | 321 | .02( .09), =.77 | .03( .44), =.95 | .13( .05), <.01 \*\* |
| working memory | map | grip | digit\_o | 321 | .05( .10), =.61 | -.35( .78), =.66 | .00( .04), =.99 |
| working memory | octo | grip | digit\_b | 139 | .06( .11), =.61 | .20( .52), =.71 | -.13( .07), =.08 . |
| working memory | satsa | grip | digit\_b | 299 | .29( .13), =.02 \* | .36(1.13), =.75 | -.02( .05), =.67 |

## female

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| domain | study | physical | cognitive |  | Corr(Levels)Est | Corr(Slopes)Est | Corr(Residuals)Est |
| attention | hrs | grip | serial7 | 4604 | .03( .03), =.32 | .45( .13), <.01 \*\*\* | -.03( .02), =.18 |
| attention | map | grip | digit\_f | 935 | .02( .04), =.68 | .46( .33), =.16 | .02( .03), =.36 |
| attention | octo | grip | digit\_f | 276 | -.06( .09), =.50 | .12( .32), =.70 | .04( .05), =.36 |
| attention | satsa | grip | digit\_f | 409 | -.01( .10), =.90 | .59( .78), =.45 | .02( .03), =.44 |
| episodic memory | eas | grip | logic\_tot | 360 | -.09( .15), =.56 | .13( .66), =.84 | .08( .09), =.39 |
| episodic memory | elsa | grip | word\_de | 3393 | .13( .03), <.01 \*\*\* | -.01( .66), =.99 | .02( .02), =.31 |
| episodic memory | hrs | grip | word\_de | 4612 | .09( .03), <.01 \*\*\* | .04( .41), =.92 | .05( .02), =.01 \* |
| episodic memory | map | grip | bstory\_de | 935 | .03( .06), =.61 | .26( .26), =.32 | -.01( .03), =.68 |
| episodic memory | map | grip | logic\_de | 935 | .00( .04), =.92 | .21( .20), =.28 | .05( .03), =.10 |
| episodic memory | map | grip | word\_de | 935 | .17( .04), <.01 \*\*\* | .46( .26), =.07 . | .00( .03), =.88 |
| episodic memory | map | grip | word\_rec | 935 | .15( .04), <.01 \*\*\* | .45(1.50), =.76 | -.02( .02), =.50 |
| episodic memory | octo | grip | mir | 273 | .16( .08), =.04 \* | .63( .16), <.01 \*\*\* | .04( .05), =.34 |
| episodic memory | octo | grip | mir\_recog | 273 | -.08( .10), =.42 | -.15( .33), =.65 | .17( .06), =.01 \*\* |
| executive function | eas | grip | trailsb | 362 | -.10( .18), =.55 | .82( .34), =.02 \* | .15( .08), =.08 . |
| fluency | eas | grip | categories | 363 | .08( .14), =.56 | .21( .38), =.58 | -.06( .07), =.40 |
| fluency | eas | grip | fas | 360 | .22( .14), =.12 | .14( .35), =.69 | .02( .09), =.86 |
| fluency | ilse | grip | fluency | 225 | .10( .11), =.35 | .58( .72), =.43 | .15( .08), =.06 . |
| fluency | map | grip | categories | 935 | .09( .04), =.03 \* | .23( .19), =.23 | .06( .03), =.03 \* |
| fluid reasoning | eas | grip | block | 351 | .18( .15), =.23 | .55( .28), =.05 \* | .02( .10), =.80 |
| fluid reasoning | ilse | grip | spatial\_ab | 225 | .01( .10), =.94 | .37( .79), =.64 | -.01( .09), =.92 |
| fluid reasoning | lasa | grip | raven | 782 | .03( .07), =.66 | .32(1.66), =.85 | .01( .03), =.70 |
| fluid reasoning | map | grip | matrices | 920 | .10( .05), =.06 . | .30( .27), =.26 | -.01( .03), =.69 |
| fluid reasoning | octo | grip | block | 275 | .30( .08), <.01 \*\*\* | .76( .27), <.01 \*\* | .05( .05), =.37 |
| fluid reasoning | octo | grip | fig\_logic | 274 | .29( .09), <.01 \*\*\* | .60( .29), =.04 \* | .06( .05), =.24 |
| fluid reasoning | satsa | grip | analogies | 409 | .01( .10), =.93 | .41( .31), =.18 | .12( .04), <.01 \*\* |
| fluid reasoning | satsa | grip | block | 409 | .22( .09), =.01 \* | .15( .36), =.68 | .14( .04), <.01 \*\*\* |
| fluid reasoning | satsa | grip | rotate | 409 | .14( .10), =.17 | .31( .69), =.65 | .10( .04), =.01 \* |
| mental status | eas | grip | mmse | 363 | .22( .20), =.27 | -.39(1.06), =.71 | -.00( .10), =.98 |
| mental status | map | grip | mmse | 935 | .03( .06), =.57 | .55( .23), =.01 \* | .02( .03), =.43 |
| mental status | nuage | grip | mmms | 934 | .04( .05), =.38 | .28( .16), =.09 . | .02( .02), =.34 |
| mental status | nuage | grip | mmse | 934 | .08( .06), =.20 | .16( .33), =.62 | -.00( .02), =.92 |
| mental status | octo | grip | clock | 276 | .19( .10), =.06 . | .67( .18), <.01 \*\*\* | .06( .07), =.36 |
| mental status | octo | grip | mmse | 276 | .04( .11), =.69 | .76( .14), <.01 \*\*\* | .16( .07), =.03 \* |
| mental status | satsa | grip | mmse | 411 | .06( .19), =.77 | .29( .28), =.29 | .13( .04), <.01 \*\*\* |
| perceptual speed | eas | grip | symbol | 363 | .28( .12), =.02 \* | .84( .20), <.01 \*\*\* | -.04( .08), =.61 |
| perceptual speed | ilse | grip | symbol | 225 | -.25( .09), =.01 \*\* | .21( .30), =.48 | -.01( .07), =.86 |
| perceptual speed | lasa | grip | letter | 782 | .03( .06), =.59 | .40( .93), =.67 | .08( .03), <.01 \*\* |
| perceptual speed | map | grip | num\_comp | 934 | .04( .04), =.43 | -.04( .24), =.88 | .03( .03), =.22 |
| perceptual speed | map | grip | symbol | 934 | .09( .04), =.06 . | .06( .22), =.77 | -.01( .03), =.74 |
| perceptual speed | octo | grip | psif | 271 | .23( .14), =.09 . | .49(1.81), =.79 | .08( .07), =.30 |
| perceptual speed | octo | grip | symbol | 272 | .18( .08), =.04 \* | .17( .30), =.58 | .12( .05), =.02 \* |
| perceptual speed | satsa | grip | symbol | 409 | .26( .09), <.01 \*\* | .46( .24), =.05 \* | .10( .04), =.01 \* |
| semantic memory | eas | grip | bnt | 363 | .16( .15), =.26 | -.43( .82), =.59 | .06( .07), =.38 |
| semantic memory | eas | grip | waisvocab | 363 | .12( .15), =.40 | .25( .64), =.69 | -.03( .10), =.80 |
| semantic memory | ilse | grip | waisgeneral | 225 | .03( .09), =.75 | .42( .42), =.32 | -.08( .08), =.31 |
| semantic memory | map | grip | bnt | 934 | .09( .04), =.05 \* | .02( .20), =.91 | -.01( .03), =.70 |
| semantic memory | map | grip | nart | 932 | -.01( .04), =.82 | .26( .27), =.33 | -.02( .03), =.49 |
| semantic memory | octo | grip | information | 275 | .19( .07), =.01 \*\* | .78( .30), =.01 \*\* | -.02( .05), =.66 |
| semantic memory | octo | grip | synonyms | 273 | .13( .09), =.16 | .69( .29), =.02 \* | -.01( .06), =.80 |
| semantic memory | satsa | grip | information | 410 | .10( .10), =.28 | .65( .25), =.01 \*\* | .05( .04), =.13 |
| semantic memory | satsa | grip | synonyms | 409 | .12( .09), =.18 | .26( .42), =.53 | .06( .04), =.10 . |
| short-term memory | eas | grip | digit\_tot | 363 | -.03( .15), =.84 | .83( .27), <.01 \*\* | -.03( .08), =.69 |
| short-term memory | eas | grip | word\_im | 363 | .10( .19), =.57 | -.09( .60), =.88 | .12( .09), =.18 |
| short-term memory | elsa | grip | word\_im | 3391 | .12( .04), <.01 \*\* | -.03( .29), =.92 | .01( .02), =.52 |
| short-term memory | hrs | grip | word\_im | 4612 | .14( .03), <.01 \*\*\* | .32( .51), =.53 | .03( .02), =.14 |
| short-term memory | lasa | grip | word\_im | 782 | .11( .07), =.10 | .23(2.09), =.91 | .12( .03), <.01 \*\*\* |
| short-term memory | map | grip | bstory\_im | 935 | -.01( .06), =.80 | .11( .28), =.69 | -.01( .03), =.66 |
| short-term memory | map | grip | logic\_im | 935 | -.00( .04), =.95 | .37( .21), =.08 . | .00( .03), =.94 |
| short-term memory | map | grip | word\_im | 935 | .17( .04), <.01 \*\*\* | .53( .20), =.01 \*\* | .02( .03), =.51 |
| short-term memory | octo | grip | prose\_im | 273 | .14( .08), =.08 . | .37( .35), =.29 | .06( .06), =.36 |
| short-term memory | satsa | grip | fig\_mem | 409 | .02( .10), =.80 | .12( .41), =.76 | .13( .04), <.01 \*\* |
| verbal comprehension | map | grip | ideas | 935 | .05( .06), =.37 | .15( .26), =.56 | .01( .03), =.63 |
| visual discrimination | ilse | grip | piccomp | 225 | .04( .12), =.76 | .26( .48), =.59 | .01( .08), =.90 |
| visual discrimination | map | grip | line | 934 | .11( .05), =.04 \* | .74(1.13), =.51 | .03( .03), =.29 |
| working memory | map | grip | digit\_b | 935 | .08( .04), =.07 . | .31( .28), =.27 | .07( .03), =.02 \* |
| working memory | map | grip | digit\_o | 935 | .06( .05), =.27 | .60( .31), =.05 . | -.00( .03), =.94 |
| working memory | octo | grip | digit\_b | 276 | -.00( .10), =.99 | -.44( .64), =.49 | .05( .05), =.33 |
| working memory | satsa | grip | digit\_b | 409 | .13( .12), =.26 | .31( .28), =.26 | .05( .04), =.16 |

# Grouped by study

## male

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| domain | study | physical | cognitive |  | Corr(Levels)Est | Corr(Slopes)Est | Corr(Residuals)Est |
| episodic memory | eas | grip | logic\_tot | 217 | -.12( .26), =.66 | .03( .49), =.95 | .13( .11), =.24 |
| executive function | eas | grip | trailsb | 221 | .23( .33), =.49 | -.37( .81), =.65 | -.03( .16), =.85 |
| fluency | eas | grip | categories | 222 | .07( .26), =.80 | .87( .55), =.11 | -.12( .13), =.37 |
| fluency | eas | grip | fas | 222 | -.04( .19), =.85 | .66(1.21), =.58 | -.08( .12), =.51 |
| fluid reasoning | eas | grip | block | 210 | .08( .29), =.77 | .64(1.24), =.60 | .00( .12), =.98 |
| mental status | eas | grip | mmse | 222 | -.02( .50), =.97 | -.33(2.08), =.88 | .09( .13), =.50 |
| perceptual speed | eas | grip | symbol | 221 | -.11( .29), =.71 | .92( .50), =.07 . | .02( .12), =.87 |
| semantic memory | eas | grip | bnt | 222 | -.11( .38), =.77 | -.18(1.82), =.92 | -.06( .12), =.64 |
| semantic memory | eas | grip | waisvocab | 222 | .12( .34), =.73 | -.02(1.37), =.99 | -.13( .14), =.37 |
| short-term memory | eas | grip | digit\_tot | 222 | .04( .25), =.86 | .28( .90), =.75 | .02( .11), =.86 |
| short-term memory | eas | grip | word\_im | 222 | -.26( .31), =.41 | .39( .61), =.53 | .07( .12), =.54 |
| episodic memory | elsa | grip | word\_de | 3045 | .04( .04), =.27 | -.51( .40), =.21 | .03( .02), =.22 |
| short-term memory | elsa | grip | word\_im | 3043 | .02( .04), =.58 | -.44( .34), =.20 | .06( .02), =.01 \* |
| attention | hrs | grip | serial7 | 3288 | .15( .04), <.01 \*\*\* | .30( .11), =.01 \*\* | -.04( .03), =.17 |
| episodic memory | hrs | grip | word\_de | 3290 | .15( .03), <.01 \*\*\* | .28( .35), =.42 | .03( .02), =.22 |
| short-term memory | hrs | grip | word\_im | 3290 | .14( .03), <.01 \*\*\* | .08( .40), =.84 | .06( .02), =.01 \* |
| fluency | ilse | grip | fluency | 252 | .07( .10), =.47 | .19( .76), =.80 | .21( .07), <.01 \*\* |
| fluid reasoning | ilse | grip | spatial\_ab | 252 | .18( .10), =.06 . | .41( .33), =.21 | -.04( .07), =.54 |
| perceptual speed | ilse | grip | symbol | 252 | -.08( .10), =.41 | -.07( .36), =.85 | .06( .08), =.40 |
| semantic memory | ilse | grip | waisgeneral | 252 | .12( .11), =.25 | .23(1.11), =.83 | -.04( .08), =.65 |
| visual discrimination | ilse | grip | piccomp | 252 | .22( .12), =.06 . | .43( .48), =.37 | .16( .09), =.09 . |
| fluid reasoning | lasa | grip | raven | 800 | .17( .05), <.01 \*\* | .93( .69), =.18 | .07( .03), =.02 \* |
| perceptual speed | lasa | grip | letter | 800 | .10( .05), =.05 \* | .61( .41), =.13 | .09( .03), =.01 \* |
| short-term memory | lasa | grip | word\_im | 800 | .07( .06), =.25 | .16( .80), =.84 | .14( .03), <.01 \*\*\* |
| attention | map | grip | digit\_f | 321 | .08( .08), =.28 | .25( .51), =.62 | .01( .05), =.88 |
| episodic memory | map | grip | bstory\_de | 321 | .10( .09), =.30 | -.55( .51), =.28 | .04( .05), =.34 |
| episodic memory | map | grip | logic\_de | 321 | -.06( .08), =.49 | -.07( .23), =.77 | .04( .04), =.32 |
| episodic memory | map | grip | word\_de | 321 | -.02( .07), =.73 | -.12( .42), =.78 | -.02( .04), =.71 |
| episodic memory | map | grip | word\_rec | 321 | .06( .07), =.38 | .11( .21), =.60 | -.02( .06), =.76 |
| fluency | map | grip | categories | 321 | .01( .07), =.86 | .25( .28), =.36 | -.04( .05), =.46 |
| fluid reasoning | map | grip | matrices | 308 | .06( .08), =.45 | .75( .12), <.01 \*\*\* | -.02( .05), =.71 |
| mental status | map | grip | mmse | 321 | .17( .07), =.01 \* | .69( .23), <.01 \*\* | .00( .05), =.98 |
| perceptual speed | map | grip | num\_comp | 321 | .04( .07), =.58 | -.21( .35), =.54 | .03( .04), =.47 |
| perceptual speed | map | grip | symbol | 321 | .13( .07), =.07 . | .49( .32), =.13 | -.01( .04), =.83 |
| semantic memory | map | grip | bnt | 321 | .19( .05), <.01 \*\*\* | .73( .18), <.01 \*\*\* | .03( .04), =.42 |
| semantic memory | map | grip | nart | 321 | .12( .06), =.06 . | .38( .33), =.25 | -.03( .06), =.59 |
| short-term memory | map | grip | bstory\_im | 321 | .14( .10), =.16 | -.03( .64), =.96 | .01( .04), =.85 |
| short-term memory | map | grip | logic\_im | 321 | -.12( .09), =.17 | -.48( .38), =.22 | .04( .05), =.40 |
| short-term memory | map | grip | word\_im | 321 | -.01( .08), =.93 | -.34( .38), =.38 | .07( .05), =.16 |
| verbal comprehension | map | grip | ideas | 321 | .16( .05), <.01 \*\*\* | .10( .15), =.51 | -.05( .03), =.13 |
| visual discrimination | map | grip | line | 321 | .06( .07), =.41 | -.18( .42), =.68 | -.03( .05), =.60 |
| working memory | map | grip | digit\_b | 321 | .02( .09), =.77 | .03( .44), =.95 | .13( .05), <.01 \*\* |
| working memory | map | grip | digit\_o | 321 | .05( .10), =.61 | -.35( .78), =.66 | .00( .04), =.99 |
| mental status | nuage | grip | mmms | 847 | .13( .05), =.01 \*\* | .28( .21), =.19 | -.04( .02), =.13 |
| mental status | nuage | grip | mmse | 847 | .18( .06), <.01 \*\* | .30( .25), =.23 | .00( .03), =.92 |
| attention | octo | grip | digit\_f | 139 | -.15( .13), =.25 | .24( .38), =.52 | -.07( .07), =.32 |
| episodic memory | octo | grip | mir | 139 | .36( .15), =.01 \* | .56( .28), =.05 \* | .01( .09), =.93 |
| episodic memory | octo | grip | mir\_recog | 139 | .09( .16), =.60 | -.34( .40), =.39 | .03( .05), =.57 |
| fluid reasoning | octo | grip | block | 139 | .30( .08), <.01 \*\*\* | -.25(1.09), =.82 | .14( .06), =.03 \* |
| fluid reasoning | octo | grip | fig\_logic | 138 | .57( .15), <.01 \*\*\* | .74(1.78), =.68 | -.05( .07), =.43 |
| mental status | octo | grip | clock | 139 | .26( .17), =.14 | .30( .42), =.48 | .14( .10), =.14 |
| mental status | octo | grip | mmse | 140 | .32( .18), =.07 . | -.11( .34), =.75 | .15( .08), =.06 . |
| perceptual speed | octo | grip | psif | 138 | .11( .17), =.49 | -.08( .64), =.90 | .12( .12), =.32 |
| perceptual speed | octo | grip | symbol | 138 | .24( .10), =.02 \* | -.08( .47), =.87 | .15( .08), =.05 . |
| semantic memory | octo | grip | information | 140 | .05( .11), =.66 | -.46( .32), =.16 | .18( .08), =.03 \* |
| semantic memory | octo | grip | synonyms | 139 | .08( .10), =.41 | -.14( .72), =.85 | .15( .08), =.06 . |
| short-term memory | octo | grip | prose\_im | 139 | .35( .11), <.01 \*\*\* | -.38(2.59), =.88 | .14( .10), =.16 |
| working memory | octo | grip | digit\_b | 139 | .06( .11), =.61 | .20( .52), =.71 | -.13( .07), =.08 . |
| attention | satsa | grip | digit\_f | 299 | .19( .12), =.12 | .40( .77), =.60 | .04( .05), =.49 |
| fluid reasoning | satsa | grip | analogies | 299 | .13( .11), =.27 | .69( .53), =.19 | .17( .05), <.01 \*\*\* |
| fluid reasoning | satsa | grip | block | 298 | .40( .09), <.01 \*\*\* | .79( .44), =.07 . | .14( .05), <.01 \*\* |
| fluid reasoning | satsa | grip | rotate | 299 | .36( .09), <.01 \*\*\* | -.13( .55), =.81 | .10( .05), =.05 . |
| mental status | satsa | grip | mmse | 299 | .27( .13), =.04 \* | .34( .30), =.27 | .13( .05), =.01 \*\* |
| perceptual speed | satsa | grip | symbol | 299 | .32( .09), <.01 \*\*\* | .04( .44), =.92 | .16( .05), <.01 \*\*\* |
| semantic memory | satsa | grip | information | 410 | .10( .10), =.28 | .65( .25), =.01 \*\* | .05( .04), =.13 |
| semantic memory | satsa | grip | synonyms | 299 | .19( .10), =.05 . | -.42( .51), =.41 | .01( .05), =.79 |
| short-term memory | satsa | grip | fig\_mem | 299 | .24( .12), =.04 \* | .50( .50), =.32 | .12( .05), =.02 \* |
| working memory | satsa | grip | digit\_b | 299 | .29( .13), =.02 \* | .36(1.13), =.75 | -.02( .05), =.67 |

## female

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| domain | study | physical | cognitive |  | Corr(Levels)Est | Corr(Slopes)Est | Corr(Residuals)Est |
| episodic memory | eas | grip | logic\_tot | 360 | -.09( .15), =.56 | .13( .66), =.84 | .08( .09), =.39 |
| executive function | eas | grip | trailsb | 362 | -.10( .18), =.55 | .82( .34), =.02 \* | .15( .08), =.08 . |
| fluency | eas | grip | categories | 363 | .08( .14), =.56 | .21( .38), =.58 | -.06( .07), =.40 |
| fluency | eas | grip | fas | 360 | .22( .14), =.12 | .14( .35), =.69 | .02( .09), =.86 |
| fluid reasoning | eas | grip | block | 351 | .18( .15), =.23 | .55( .28), =.05 \* | .02( .10), =.80 |
| mental status | eas | grip | mmse | 363 | .22( .20), =.27 | -.39(1.06), =.71 | -.00( .10), =.98 |
| perceptual speed | eas | grip | symbol | 363 | .28( .12), =.02 \* | .84( .20), <.01 \*\*\* | -.04( .08), =.61 |
| semantic memory | eas | grip | bnt | 363 | .16( .15), =.26 | -.43( .82), =.59 | .06( .07), =.38 |
| semantic memory | eas | grip | waisvocab | 363 | .12( .15), =.40 | .25( .64), =.69 | -.03( .10), =.80 |
| short-term memory | eas | grip | digit\_tot | 363 | -.03( .15), =.84 | .83( .27), <.01 \*\* | -.03( .08), =.69 |
| short-term memory | eas | grip | word\_im | 363 | .10( .19), =.57 | -.09( .60), =.88 | .12( .09), =.18 |
| episodic memory | elsa | grip | word\_de | 3393 | .13( .03), <.01 \*\*\* | -.01( .66), =.99 | .02( .02), =.31 |
| short-term memory | elsa | grip | word\_im | 3391 | .12( .04), <.01 \*\* | -.03( .29), =.92 | .01( .02), =.52 |
| attention | hrs | grip | serial7 | 4604 | .03( .03), =.32 | .45( .13), <.01 \*\*\* | -.03( .02), =.18 |
| episodic memory | hrs | grip | word\_de | 4612 | .09( .03), <.01 \*\*\* | .04( .41), =.92 | .05( .02), =.01 \* |
| short-term memory | hrs | grip | word\_im | 4612 | .14( .03), <.01 \*\*\* | .32( .51), =.53 | .03( .02), =.14 |
| fluency | ilse | grip | fluency | 225 | .10( .11), =.35 | .58( .72), =.43 | .15( .08), =.06 . |
| fluid reasoning | ilse | grip | spatial\_ab | 225 | .01( .10), =.94 | .37( .79), =.64 | -.01( .09), =.92 |
| perceptual speed | ilse | grip | symbol | 225 | -.25( .09), =.01 \*\* | .21( .30), =.48 | -.01( .07), =.86 |
| semantic memory | ilse | grip | waisgeneral | 225 | .03( .09), =.75 | .42( .42), =.32 | -.08( .08), =.31 |
| visual discrimination | ilse | grip | piccomp | 225 | .04( .12), =.76 | .26( .48), =.59 | .01( .08), =.90 |
| fluid reasoning | lasa | grip | raven | 782 | .03( .07), =.66 | .32(1.66), =.85 | .01( .03), =.70 |
| perceptual speed | lasa | grip | letter | 782 | .03( .06), =.59 | .40( .93), =.67 | .08( .03), <.01 \*\* |
| short-term memory | lasa | grip | word\_im | 782 | .11( .07), =.10 | .23(2.09), =.91 | .12( .03), <.01 \*\*\* |
| attention | map | grip | digit\_f | 935 | .02( .04), =.68 | .46( .33), =.16 | .02( .03), =.36 |
| episodic memory | map | grip | bstory\_de | 935 | .03( .06), =.61 | .26( .26), =.32 | -.01( .03), =.68 |
| episodic memory | map | grip | logic\_de | 935 | .00( .04), =.92 | .21( .20), =.28 | .05( .03), =.10 |
| episodic memory | map | grip | word\_de | 935 | .17( .04), <.01 \*\*\* | .46( .26), =.07 . | .00( .03), =.88 |
| episodic memory | map | grip | word\_rec | 935 | .15( .04), <.01 \*\*\* | .45(1.50), =.76 | -.02( .02), =.50 |
| fluency | map | grip | categories | 935 | .09( .04), =.03 \* | .23( .19), =.23 | .06( .03), =.03 \* |
| fluid reasoning | map | grip | matrices | 920 | .10( .05), =.06 . | .30( .27), =.26 | -.01( .03), =.69 |
| mental status | map | grip | mmse | 935 | .03( .06), =.57 | .55( .23), =.01 \* | .02( .03), =.43 |
| perceptual speed | map | grip | num\_comp | 934 | .04( .04), =.43 | -.04( .24), =.88 | .03( .03), =.22 |
| perceptual speed | map | grip | symbol | 934 | .09( .04), =.06 . | .06( .22), =.77 | -.01( .03), =.74 |
| semantic memory | map | grip | bnt | 934 | .09( .04), =.05 \* | .02( .20), =.91 | -.01( .03), =.70 |
| semantic memory | map | grip | nart | 932 | -.01( .04), =.82 | .26( .27), =.33 | -.02( .03), =.49 |
| short-term memory | map | grip | bstory\_im | 935 | -.01( .06), =.80 | .11( .28), =.69 | -.01( .03), =.66 |
| short-term memory | map | grip | logic\_im | 935 | -.00( .04), =.95 | .37( .21), =.08 . | .00( .03), =.94 |
| short-term memory | map | grip | word\_im | 935 | .17( .04), <.01 \*\*\* | .53( .20), =.01 \*\* | .02( .03), =.51 |
| verbal comprehension | map | grip | ideas | 935 | .05( .06), =.37 | .15( .26), =.56 | .01( .03), =.63 |
| visual discrimination | map | grip | line | 934 | .11( .05), =.04 \* | .74(1.13), =.51 | .03( .03), =.29 |
| working memory | map | grip | digit\_b | 935 | .08( .04), =.07 . | .31( .28), =.27 | .07( .03), =.02 \* |
| working memory | map | grip | digit\_o | 935 | .06( .05), =.27 | .60( .31), =.05 . | -.00( .03), =.94 |
| mental status | nuage | grip | mmms | 934 | .04( .05), =.38 | .28( .16), =.09 . | .02( .02), =.34 |
| mental status | nuage | grip | mmse | 934 | .08( .06), =.20 | .16( .33), =.62 | -.00( .02), =.92 |
| attention | octo | grip | digit\_f | 276 | -.06( .09), =.50 | .12( .32), =.70 | .04( .05), =.36 |
| episodic memory | octo | grip | mir | 273 | .16( .08), =.04 \* | .63( .16), <.01 \*\*\* | .04( .05), =.34 |
| episodic memory | octo | grip | mir\_recog | 273 | -.08( .10), =.42 | -.15( .33), =.65 | .17( .06), =.01 \*\* |
| fluid reasoning | octo | grip | block | 275 | .30( .08), <.01 \*\*\* | .76( .27), <.01 \*\* | .05( .05), =.37 |
| fluid reasoning | octo | grip | fig\_logic | 274 | .29( .09), <.01 \*\*\* | .60( .29), =.04 \* | .06( .05), =.24 |
| mental status | octo | grip | clock | 276 | .19( .10), =.06 . | .67( .18), <.01 \*\*\* | .06( .07), =.36 |
| mental status | octo | grip | mmse | 276 | .04( .11), =.69 | .76( .14), <.01 \*\*\* | .16( .07), =.03 \* |
| perceptual speed | octo | grip | psif | 271 | .23( .14), =.09 . | .49(1.81), =.79 | .08( .07), =.30 |
| perceptual speed | octo | grip | symbol | 272 | .18( .08), =.04 \* | .17( .30), =.58 | .12( .05), =.02 \* |
| semantic memory | octo | grip | information | 275 | .19( .07), =.01 \*\* | .78( .30), =.01 \*\* | -.02( .05), =.66 |
| semantic memory | octo | grip | synonyms | 273 | .13( .09), =.16 | .69( .29), =.02 \* | -.01( .06), =.80 |
| short-term memory | octo | grip | prose\_im | 273 | .14( .08), =.08 . | .37( .35), =.29 | .06( .06), =.36 |
| working memory | octo | grip | digit\_b | 276 | -.00( .10), =.99 | -.44( .64), =.49 | .05( .05), =.33 |
| attention | satsa | grip | digit\_f | 409 | -.01( .10), =.90 | .59( .78), =.45 | .02( .03), =.44 |
| fluid reasoning | satsa | grip | analogies | 409 | .01( .10), =.93 | .41( .31), =.18 | .12( .04), <.01 \*\* |
| fluid reasoning | satsa | grip | block | 409 | .22( .09), =.01 \* | .15( .36), =.68 | .14( .04), <.01 \*\*\* |
| fluid reasoning | satsa | grip | rotate | 409 | .14( .10), =.17 | .31( .69), =.65 | .10( .04), =.01 \* |
| mental status | satsa | grip | mmse | 411 | .06( .19), =.77 | .29( .28), =.29 | .13( .04), <.01 \*\*\* |
| perceptual speed | satsa | grip | symbol | 409 | .26( .09), <.01 \*\* | .46( .24), =.05 \* | .10( .04), =.01 \* |
| semantic memory | satsa | grip | information | 410 | .10( .10), =.28 | .65( .25), =.01 \*\* | .05( .04), =.13 |
| semantic memory | satsa | grip | synonyms | 409 | .12( .09), =.18 | .26( .42), =.53 | .06( .04), =.10 . |
| short-term memory | satsa | grip | fig\_mem | 409 | .02( .10), =.80 | .12( .41), =.76 | .13( .04), <.01 \*\* |
| working memory | satsa | grip | digit\_b | 409 | .13( .12), =.26 | .31( .28), =.26 | .05( .04), =.16 |

# Session Information

For the sake of documentation and reproducibility, the current report was rendered on a system using the following software.

Report rendered by koval\_000 at 2017-01-27, 12:58 -0500

R version 3.3.2 (2016-10-31)  
Platform: x86\_64-w64-mingw32/x64 (64-bit)  
Running under: Windows >= 8 x64 (build 9200)  
  
locale:  
[1] LC\_COLLATE=English\_United States.1252 LC\_CTYPE=English\_United States.1252 LC\_MONETARY=English\_United States.1252  
[4] LC\_NUMERIC=C LC\_TIME=English\_United States.1252   
  
attached base packages:  
[1] grid stats graphics grDevices utils datasets methods base   
  
other attached packages:  
[1] knitr\_1.15.1 IalsaSynthesis\_0.1.8.9000 MplusAutomation\_0.6-4 ggplot2\_2.2.1   
[5] forestplot\_1.7 checkmate\_1.8.2 magrittr\_1.5   
  
loaded via a namespace (and not attached):  
 [1] Rcpp\_0.12.8 plyr\_1.8.4 highr\_0.6 tools\_3.3.2 boot\_1.3-18 digest\_0.6.11   
 [7] jsonlite\_1.2 evaluate\_0.10 tibble\_1.2 gtable\_0.2.0 lattice\_0.20-34 texreg\_1.36.18   
[13] DBI\_0.5-1 yaml\_2.1.14 proto\_1.0.0 coda\_0.19-1 dplyr\_0.5.0 stringr\_1.1.0   
[19] htmlwidgets\_0.8 rprojroot\_1.1 DT\_0.2 R6\_2.2.0 rmarkdown\_1.3 gsubfn\_0.6-6   
[25] pander\_0.6.0 tidyr\_0.6.1 readr\_1.0.0 backports\_1.0.4 scales\_0.4.1 htmltools\_0.3.5   
[31] assertthat\_0.1 testit\_0.6 colorspace\_1.3-2 xtable\_1.8-2 stringi\_1.1.2 lazyeval\_0.2.0   
[37] munsell\_0.4.3