MAP : Seed report

Date: 2016-12-05

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This report contains a searchable table, followed by publication-ready tables.

# Available models

Study **MAP** have contributed the following outcome pairs to the IASLA-2015-Portland model pool: NULL

|  |  |  |
| --- | --- | --- |
| process\_a | process\_b | n\_models |
| gait | bnt | 8 |
| gait | bstory\_de | 8 |
| gait | bstory\_im | 8 |
| gait | categories | 8 |
| gait | digit\_b | 8 |
| gait | digit\_f | 8 |
| gait | digit\_o | 8 |
| gait | ideas | 8 |
| gait | line | 8 |
| gait | logic\_de | 8 |
| gait | logic\_im | 8 |
| gait | matrices | 8 |
| gait | mmse | 8 |
| gait | nart | 8 |
| gait | num\_comp | 8 |
| gait | symbol | 8 |
| gait | word\_de | 8 |
| gait | word\_im | 8 |
| gait | word\_rec | 8 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| study\_name | subgroup | model\_type | process\_a | process\_b | n\_models |
| map | female | a | gait | bnt | 1 |
| map | female | a | gait | bstory\_de | 1 |
| map | female | a | gait | bstory\_im | 1 |
| map | female | a | gait | categories | 1 |
| map | female | a | gait | digit\_b | 1 |
| map | female | a | gait | digit\_f | 1 |
| map | female | a | gait | digit\_o | 1 |
| map | female | a | gait | ideas | 1 |
| map | female | a | gait | line | 1 |
| map | female | a | gait | logic\_de | 1 |
| map | female | a | gait | logic\_im | 1 |
| map | female | a | gait | matrices | 1 |
| map | female | a | gait | mmse | 1 |
| map | female | a | gait | nart | 1 |
| map | female | a | gait | num\_comp | 1 |
| map | female | a | gait | symbol | 1 |
| map | female | a | gait | word\_de | 1 |
| map | female | a | gait | word\_im | 1 |
| map | female | a | gait | word\_rec | 1 |
| map | female | ae | gait | bnt | 1 |
| map | female | ae | gait | bstory\_de | 1 |
| map | female | ae | gait | bstory\_im | 1 |
| map | female | ae | gait | categories | 1 |
| map | female | ae | gait | digit\_b | 1 |
| map | female | ae | gait | digit\_f | 1 |
| map | female | ae | gait | digit\_o | 1 |
| map | female | ae | gait | ideas | 1 |
| map | female | ae | gait | line | 1 |
| map | female | ae | gait | logic\_de | 1 |
| map | female | ae | gait | logic\_im | 1 |
| map | female | ae | gait | matrices | 1 |
| map | female | ae | gait | mmse | 1 |
| map | female | ae | gait | nart | 1 |
| map | female | ae | gait | num\_comp | 1 |
| map | female | ae | gait | symbol | 1 |
| map | female | ae | gait | word\_de | 1 |
| map | female | ae | gait | word\_im | 1 |
| map | female | ae | gait | word\_rec | 1 |
| map | female | aeh | gait | bnt | 1 |
| map | female | aeh | gait | bstory\_de | 1 |
| map | female | aeh | gait | bstory\_im | 1 |
| map | female | aeh | gait | categories | 1 |
| map | female | aeh | gait | digit\_b | 1 |
| map | female | aeh | gait | digit\_f | 1 |
| map | female | aeh | gait | digit\_o | 1 |
| map | female | aeh | gait | ideas | 1 |
| map | female | aeh | gait | line | 1 |
| map | female | aeh | gait | logic\_de | 1 |
| map | female | aeh | gait | logic\_im | 1 |
| map | female | aeh | gait | matrices | 1 |
| map | female | aeh | gait | mmse | 1 |
| map | female | aeh | gait | nart | 1 |
| map | female | aeh | gait | num\_comp | 1 |
| map | female | aeh | gait | symbol | 1 |
| map | female | aeh | gait | word\_de | 1 |
| map | female | aeh | gait | word\_im | 1 |
| map | female | aeh | gait | word\_rec | 1 |
| map | female | aehplus | gait | bnt | 1 |
| map | female | aehplus | gait | bstory\_de | 1 |
| map | female | aehplus | gait | bstory\_im | 1 |
| map | female | aehplus | gait | categories | 1 |
| map | female | aehplus | gait | digit\_b | 1 |
| map | female | aehplus | gait | digit\_f | 1 |
| map | female | aehplus | gait | digit\_o | 1 |
| map | female | aehplus | gait | ideas | 1 |
| map | female | aehplus | gait | line | 1 |
| map | female | aehplus | gait | logic\_de | 1 |
| map | female | aehplus | gait | logic\_im | 1 |
| map | female | aehplus | gait | matrices | 1 |
| map | female | aehplus | gait | mmse | 1 |
| map | female | aehplus | gait | nart | 1 |
| map | female | aehplus | gait | num\_comp | 1 |
| map | female | aehplus | gait | symbol | 1 |
| map | female | aehplus | gait | word\_de | 1 |
| map | female | aehplus | gait | word\_im | 1 |
| map | female | aehplus | gait | word\_rec | 1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| study\_name | subgroup | model\_type | process\_a | process\_b | n\_models |
| map | male | a | gait | bnt | 1 |
| map | male | a | gait | bstory\_de | 1 |
| map | male | a | gait | bstory\_im | 1 |
| map | male | a | gait | categories | 1 |
| map | male | a | gait | digit\_b | 1 |
| map | male | a | gait | digit\_f | 1 |
| map | male | a | gait | digit\_o | 1 |
| map | male | a | gait | ideas | 1 |
| map | male | a | gait | line | 1 |
| map | male | a | gait | logic\_de | 1 |
| map | male | a | gait | logic\_im | 1 |
| map | male | a | gait | matrices | 1 |
| map | male | a | gait | mmse | 1 |
| map | male | a | gait | nart | 1 |
| map | male | a | gait | num\_comp | 1 |
| map | male | a | gait | symbol | 1 |
| map | male | a | gait | word\_de | 1 |
| map | male | a | gait | word\_im | 1 |
| map | male | a | gait | word\_rec | 1 |
| map | male | ae | gait | bnt | 1 |
| map | male | ae | gait | bstory\_de | 1 |
| map | male | ae | gait | bstory\_im | 1 |
| map | male | ae | gait | categories | 1 |
| map | male | ae | gait | digit\_b | 1 |
| map | male | ae | gait | digit\_f | 1 |
| map | male | ae | gait | digit\_o | 1 |
| map | male | ae | gait | ideas | 1 |
| map | male | ae | gait | line | 1 |
| map | male | ae | gait | logic\_de | 1 |
| map | male | ae | gait | logic\_im | 1 |
| map | male | ae | gait | matrices | 1 |
| map | male | ae | gait | mmse | 1 |
| map | male | ae | gait | nart | 1 |
| map | male | ae | gait | num\_comp | 1 |
| map | male | ae | gait | symbol | 1 |
| map | male | ae | gait | word\_de | 1 |
| map | male | ae | gait | word\_im | 1 |
| map | male | ae | gait | word\_rec | 1 |
| map | male | aeh | gait | bnt | 1 |
| map | male | aeh | gait | bstory\_de | 1 |
| map | male | aeh | gait | bstory\_im | 1 |
| map | male | aeh | gait | categories | 1 |
| map | male | aeh | gait | digit\_b | 1 |
| map | male | aeh | gait | digit\_f | 1 |
| map | male | aeh | gait | digit\_o | 1 |
| map | male | aeh | gait | ideas | 1 |
| map | male | aeh | gait | line | 1 |
| map | male | aeh | gait | logic\_de | 1 |
| map | male | aeh | gait | logic\_im | 1 |
| map | male | aeh | gait | matrices | 1 |
| map | male | aeh | gait | mmse | 1 |
| map | male | aeh | gait | nart | 1 |
| map | male | aeh | gait | num\_comp | 1 |
| map | male | aeh | gait | symbol | 1 |
| map | male | aeh | gait | word\_de | 1 |
| map | male | aeh | gait | word\_im | 1 |
| map | male | aeh | gait | word\_rec | 1 |
| map | male | aehplus | gait | bnt | 1 |
| map | male | aehplus | gait | bstory\_de | 1 |
| map | male | aehplus | gait | bstory\_im | 1 |
| map | male | aehplus | gait | categories | 1 |
| map | male | aehplus | gait | digit\_b | 1 |
| map | male | aehplus | gait | digit\_f | 1 |
| map | male | aehplus | gait | digit\_o | 1 |
| map | male | aehplus | gait | ideas | 1 |
| map | male | aehplus | gait | line | 1 |
| map | male | aehplus | gait | logic\_de | 1 |
| map | male | aehplus | gait | logic\_im | 1 |
| map | male | aehplus | gait | matrices | 1 |
| map | male | aehplus | gait | mmse | 1 |
| map | male | aehplus | gait | nart | 1 |
| map | male | aehplus | gait | num\_comp | 1 |
| map | male | aehplus | gait | symbol | 1 |
| map | male | aehplus | gait | word\_de | 1 |
| map | male | aehplus | gait | word\_im | 1 |
| map | male | aehplus | gait | word\_rec | 1 |

# female

Gender = *female*; Model type: *aehplus*; Process (a) = *gait*; Process (b): *bnt*, *bstory\_de*, *bstory\_im*, *categories*, *digit\_b*, *digit\_f*, *digit\_o*, *ideas*, *line*, *logic\_de*, *logic\_im*, *matrices*, *mmse*, *nart*, *num\_comp*, *symbol*, *word\_de*, *word\_im*, *word\_rec*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| process | label | bnt | bstory\_de | bstory\_im | categories | digit\_b | digit\_f | digit\_o | ideas | line | logic\_de | logic\_im | matrices | mmse | nart | num\_comp | symbol | word\_de | word\_im | word\_rec | mean(sd) |
| ab | Covar (Levels) | 0.02 (0.01) <.01 | 0.00 (0.01) .80 | 0.01 (0.01) .30 | 0.18 (0.05) <.01 | 0.06 (0.01) <.01 | 0.02 (0.01) .06 | 0.02 (0.01) <.01 | 0.01 (0.00) .01 | 0.08 (0.02) <.01 | 0.05 (0.02) .05 | 0.05 (0.02) .04 | 0.06 (0.01) <.01 | 0.03 (0.01) <.01 | 0.02 (0.01) .05 | 0.10 (0.04) .03 | 0.27 (0.06) <.01 | 0.05 (0.01) <.01 | 0.13 (0.02) <.01 | 0.01 (0.00) .08 | --- |
| ab | Covar (Slopes) | 0.00 (0.00) .10 | 0.00 (0.00) .64 | 0.00 (0.00) .28 | 0.01 (0.00) .02 | 0.00 (0.00) .08 | 0.00 (0.00) .76 | 0.00 (0.00) .74 | 0.00 (0.00) .27 | 0.00 (0.00) .89 | 0.00 (0.00) .03 | 0.00 (0.00) .02 | 0.00 (0.00) .97 | 0.00 (0.00) .37 | 0.00 (0.00) .65 | 0.00 (0.00) .22 | 0.00 (0.00) .59 | 0.00 (0.00) <.01 | 0.00 (0.00) .05 | 0.00 (0.00) .97 | --- |
| ab | Covar (Residuals) | -0.00 (0.00) .69 | 0.01 (0.00) .11 | 0.01 (0.00) .16 | -0.01 (0.02) .32 | -0.00 (0.00) .47 | 0.00 (0.00) .28 | 0.00 (0.00) .92 | 0.00 (0.00) .26 | 0.00 (0.01) .54 | 0.00 (0.01) .92 | 0.01 (0.01) .07 | 0.00 (0.01) .83 | 0.01 (0.00) .01 | 0.01 (0.00) <.01 | 0.03 (0.01) .02 | 0.04 (0.02) .03 | -0.00 (0.00) .46 | -0.00 (0.01) .80 | 0.00 (0.00) .87 | --- |
| er | Corr (Levels) | 0.18 (0.04) <.01 | 0.02 (0.07) .80 | 0.07 (0.07) .29 | 0.18 (0.05) <.01 | 0.26 (0.05) <.01 | 0.10 (0.05) .05 | 0.17 (0.06) <.01 | 0.16 (0.06) .01 | 0.26 (0.06) <.01 | 0.10 (0.05) .04 | 0.11 (0.05) .04 | 0.24 (0.06) <.01 | 0.22 (0.06) <.01 | 0.09 (0.04) .05 | 0.11 (0.05) .02 | 0.23 (0.04) <.01 | 0.19 (0.05) <.01 | 0.28 (0.05) <.01 | 0.09 (0.05) .09 | --- |
| er | Corr (Slopes) | 0.28 (0.17) .11 | 0.11 (0.23) .64 | 0.28 (0.26) .28 | 0.39 (0.17) .02 | 0.48 (0.29) .09 | 0.09 (0.30) .76 | -0.08 (0.25) .74 | 0.22 (0.20) .27 | -0.08 (0.64) .90 | 0.40 (0.17) .02 | 0.43 (0.17) .01 | 0.01 (0.30) .97 | 0.19 (0.20) .36 | -0.10 (0.22) .65 | 0.29 (0.23) .20 | 0.09 (0.16) .59 | 0.73 (0.25) <.01 | 0.34 (0.17) .04 | -0.02 (0.57) .97 | --- |
| er | Corr (Residuals) | -0.01 (0.02) .69 | 0.04 (0.02) .11 | 0.04 (0.03) .16 | -0.02 (0.02) .32 | -0.02 (0.03) .47 | 0.03 (0.03) .27 | 0.00 (0.02) .92 | 0.03 (0.02) .26 | 0.01 (0.02) .54 | 0.00 (0.02) .92 | 0.04 (0.02) .06 | 0.01 (0.03) .83 | 0.07 (0.03) .01 | 0.08 (0.03) <.01 | 0.06 (0.02) .02 | 0.06 (0.03) .03 | -0.02 (0.02) .46 | -0.01 (0.02) .80 | -0.00 (0.03) .87 | --- |
| a | Level | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65 (0.02) <.01 | 0.65(0.00) |
| a | Slope | -0.00 (0.01) .84 | -0.00 (0.01) .91 | -0.00 (0.01) .92 | -0.00 (0.01) .76 | -0.00 (0.01) .74 | -0.00 (0.01) .82 | -0.00 (0.01) .78 | -0.00 (0.01) .91 | -0.00 (0.01) .80 | -0.00 (0.01) .84 | -0.00 (0.01) .87 | -0.00 (0.01) .80 | -0.00 (0.01) .82 | -0.00 (0.01) .78 | -0.00 (0.01) .62 | -0.00 (0.01) .67 | -0.00 (0.01) .83 | -0.00 (0.01) .78 | -0.00 (0.01) .86 | -0.00(0.00) |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01(0.00) |
| a | Level \* education | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01(0.00) |
| a | Level \* height | 0.24 (0.10) .02 | 0.24 (0.10) .02 | 0.24 (0.10) .02 | 0.24 (0.10) .02 | 0.23 (0.10) .02 | 0.24 (0.10) .02 | 0.24 (0.10) .02 | 0.24 (0.10) .02 | 0.24 (0.10) .02 | 0.24 (0.10) .02 | 0.24 (0.10) .02 | 0.23 (0.10) .02 | 0.23 (0.10) .02 | 0.24 (0.10) .02 | 0.24 (0.10) .02 | 0.24 (0.10) .02 | 0.24 (0.10) .02 | 0.23 (0.10) .02 | 0.24 (0.10) .02 | 0.24(0.00) |
| a | Level \* smoking | -0.02 (0.01) .17 | -0.02 (0.01) .18 | -0.02 (0.01) .18 | -0.02 (0.01) .17 | -0.02 (0.01) .19 | -0.02 (0.01) .17 | -0.02 (0.01) .18 | -0.02 (0.01) .17 | -0.02 (0.01) .16 | -0.02 (0.01) .17 | -0.02 (0.01) .18 | -0.02 (0.01) .17 | -0.02 (0.01) .18 | -0.02 (0.01) .16 | -0.02 (0.01) .17 | -0.02 (0.01) .17 | -0.02 (0.01) .18 | -0.02 (0.01) .18 | -0.02 (0.01) .17 | -0.02(0.00) |
| a | Level \* cardio | 0.02 (0.02) .21 | 0.02 (0.02) .21 | 0.02 (0.02) .22 | 0.02 (0.02) .21 | 0.02 (0.02) .20 | 0.02 (0.02) .21 | 0.02 (0.02) .21 | 0.02 (0.02) .20 | 0.02 (0.02) .22 | 0.02 (0.02) .21 | 0.02 (0.02) .20 | 0.02 (0.02) .20 | 0.02 (0.02) .22 | 0.02 (0.02) .21 | 0.02 (0.02) .21 | 0.02 (0.02) .21 | 0.02 (0.02) .22 | 0.02 (0.02) .21 | 0.02 (0.02) .23 | 0.02(0.00) |
| a | Level \* diabetes | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.06(0.00) |
| a | Slope \* age | -0.00 (0.00) .05 | -0.00 (0.00) .05 | -0.00 (0.00) .05 | -0.00 (0.00) .03 | -0.00 (0.00) .04 | -0.00 (0.00) .04 | -0.00 (0.00) .05 | -0.00 (0.00) .04 | -0.00 (0.00) .04 | -0.00 (0.00) .04 | -0.00 (0.00) .04 | -0.00 (0.00) .04 | -0.00 (0.00) .04 | -0.00 (0.00) .05 | -0.00 (0.00) .06 | -0.00 (0.00) .05 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .05 | -0.00(0.00) |
| a | Slope \* education | -0.00 (0.00) .03 | -0.00 (0.00) .02 | -0.00 (0.00) .02 | -0.00 (0.00) .03 | -0.00 (0.00) .04 | -0.00 (0.00) .03 | -0.00 (0.00) .04 | -0.00 (0.00) .03 | -0.00 (0.00) .04 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 | -0.00 (0.00) .03 | -0.00 (0.00) .04 | -0.00 (0.00) .06 | -0.00 (0.00) .05 | -0.00 (0.00) .03 | -0.00 (0.00) .04 | -0.00 (0.00) .03 | -0.00(0.00) |
| a | Slope \* height | -0.03 (0.04) .43 | -0.03 (0.04) .40 | -0.03 (0.04) .40 | -0.03 (0.04) .43 | -0.03 (0.04) .46 | -0.03 (0.04) .45 | -0.03 (0.04) .44 | -0.03 (0.04) .44 | -0.03 (0.04) .44 | -0.03 (0.04) .37 | -0.03 (0.04) .40 | -0.03 (0.04) .47 | -0.03 (0.04) .48 | -0.03 (0.04) .42 | -0.03 (0.04) .47 | -0.03 (0.04) .44 | -0.03 (0.04) .41 | -0.02 (0.04) .49 | -0.03 (0.04) .42 | -0.03(0.00) |
| a | Slope \* smoking | -0.00 (0.00) .45 | -0.00 (0.00) .47 | -0.00 (0.00) .45 | -0.00 (0.00) .43 | -0.00 (0.00) .41 | -0.00 (0.00) .42 | -0.00 (0.00) .45 | -0.00 (0.00) .42 | -0.00 (0.00) .44 | -0.00 (0.00) .42 | -0.00 (0.00) .40 | -0.00 (0.00) .43 | -0.00 (0.00) .43 | -0.00 (0.00) .41 | -0.00 (0.00) .40 | -0.00 (0.00) .40 | -0.00 (0.00) .45 | -0.00 (0.00) .48 | -0.00 (0.00) .45 | -0.00(0.00) |
| a | Slope \* cardio | -0.01 (0.00) .25 | -0.01 (0.00) .24 | -0.01 (0.00) .25 | -0.01 (0.00) .26 | -0.01 (0.00) .28 | -0.01 (0.00) .28 | -0.01 (0.00) .25 | -0.01 (0.00) .25 | -0.01 (0.00) .28 | -0.01 (0.00) .25 | -0.01 (0.00) .23 | -0.01 (0.00) .26 | -0.01 (0.00) .31 | -0.01 (0.00) .26 | -0.01 (0.00) .29 | -0.01 (0.00) .28 | -0.01 (0.00) .28 | -0.01 (0.00) .29 | -0.01 (0.00) .27 | -0.01(0.00) |
| a | Slope \* diabetes | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01(0.00) |
| b | Level | 13.59 (0.15) <.01 | 8.92 (0.17) <.01 | 9.31 (0.16) <.01 | 32.42 (0.80) <.01 | 5.16 (0.20) <.01 | 7.36 (0.22) <.01 | 6.51 (0.16) <.01 | 7.58 (0.06) <.01 | 7.99 (0.30) <.01 | 8.47 (0.41) <.01 | 10.31 (0.42) <.01 | 10.12 (0.27) <.01 | 27.80 (0.16) <.01 | 5.36 (0.24) <.01 | 23.29 (0.77) <.01 | 35.74 (1.08) <.01 | 5.44 (0.21) <.01 | 16.81 (0.40) <.01 | 9.65 (0.09) <.01 | --- |
| b | Slope | 0.07 (0.04) .07 | 0.05 (0.07) .43 | 0.03 (0.06) .66 | 0.06 (0.22) .80 | -0.03 (0.06) .63 | -0.00 (0.06) .98 | 0.09 (0.05) .07 | 0.02 (0.02) .40 | 0.08 (0.09) .37 | 0.39 (0.12) <.01 | 0.31 (0.12) .01 | 0.05 (0.09) .59 | 0.06 (0.07) .34 | 0.02 (0.05) .70 | 0.39 (0.17) .02 | 0.85 (0.24) <.01 | 0.15 (0.06) .01 | 0.49 (0.12) <.01 | 0.02 (0.02) .38 | --- |
| b | Level \* age | -0.03 (0.00) <.01 | -0.02 (0.01) <.01 | -0.02 (0.01) <.01 | -0.26 (0.04) <.01 | 0.01 (0.01) .48 | 0.00 (0.01) .98 | -0.00 (0.01) .65 | 0.00 (0.00) .26 | -0.01 (0.01) .31 | -0.10 (0.02) <.01 | -0.10 (0.02) <.01 | -0.05 (0.01) <.01 | -0.05 (0.01) <.01 | 0.04 (0.01) <.01 | -0.17 (0.03) <.01 | -0.38 (0.04) <.01 | -0.06 (0.01) <.01 | -0.11 (0.02) <.01 | -0.02 (0.00) <.01 | --- |
| b | Level \* education | 0.09 (0.01) <.01 | 0.09 (0.02) <.01 | 0.08 (0.02) <.01 | 0.82 (0.08) <.01 | 0.15 (0.02) <.01 | 0.12 (0.02) <.01 | 0.12 (0.02) <.01 | 0.01 (0.00) <.01 | 0.25 (0.03) <.01 | 0.35 (0.04) <.01 | 0.33 (0.04) <.01 | 0.30 (0.02) <.01 | 0.14 (0.02) <.01 | 0.31 (0.02) <.01 | 0.50 (0.08) <.01 | 1.01 (0.10) <.01 | 0.14 (0.02) <.01 | 0.35 (0.04) <.01 | 0.02 (0.01) .01 | --- |
| b | Level \* height | 2.33 (0.60) <.01 | 0.72 (0.80) .37 | 0.74 (0.79) .35 | 12.84 (3.75) <.01 | 2.82 (0.88) <.01 | 2.50 (0.91) .01 | 1.90 (0.69) .01 | 0.23 (0.26) .37 | 2.71 (1.26) .03 | 5.52 (1.75) <.01 | 4.27 (1.65) .01 | 4.96 (1.20) <.01 | 0.79 (0.71) .27 | 3.18 (1.02) <.01 | 11.38 (3.37) <.01 | 16.69 (4.22) <.01 | 2.04 (0.88) .02 | 4.41 (1.81) .01 | 0.45 (0.45) .32 | --- |
| b | Level \* smoking | 0.03 (0.07) .71 | 0.02 (0.12) .86 | 0.10 (0.10) .33 | -0.64 (0.51) .21 | -0.02 (0.12) .87 | -0.01 (0.12) .94 | -0.04 (0.09) .64 | -0.02 (0.03) .47 | -0.23 (0.18) .19 | 0.08 (0.26) .76 | -0.11 (0.25) .66 | 0.03 (0.15) .86 | -0.01 (0.09) .88 | 0.05 (0.13) .70 | -0.37 (0.44) .40 | -0.14 (0.59) .81 | -0.20 (0.13) .12 | -0.49 (0.25) .05 | -0.04 (0.05) .47 | --- |
| b | Level \* cardio | 0.09 (0.11) .43 | -0.12 (0.19) .52 | -0.08 (0.16) .60 | -0.64 (0.74) .38 | -0.38 (0.18) .04 | 0.22 (0.19) .24 | -0.05 (0.14) .71 | -0.03 (0.05) .59 | 0.07 (0.26) .78 | -0.06 (0.42) .89 | -0.10 (0.40) .81 | -0.45 (0.25) .07 | -0.11 (0.13) .42 | 0.26 (0.19) .19 | -0.48 (0.70) .49 | -0.67 (0.89) .45 | -0.33 (0.21) .12 | -0.33 (0.37) .37 | -0.10 (0.10) .32 | --- |
| b | Level \* diabetes | -0.22 (0.11) .04 | 0.14 (0.14) .32 | 0.17 (0.13) .19 | -0.37 (0.64) .57 | 0.17 (0.16) .28 | 0.16 (0.17) .34 | 0.07 (0.13) .59 | -0.10 (0.05) .06 | 0.07 (0.24) .78 | 0.20 (0.32) .54 | 0.04 (0.31) .91 | -0.14 (0.21) .51 | 0.01 (0.13) .95 | -0.50 (0.19) .01 | -0.32 (0.60) .59 | -1.22 (0.81) .13 | 0.16 (0.16) .30 | 0.32 (0.32) .32 | 0.09 (0.06) .17 | --- |
| b | Slope \* age | -0.00 (0.00) .66 | -0.01 (0.00) <.01 | -0.00 (0.00) .14 | -0.03 (0.01) <.01 | -0.00 (0.00) .80 | 0.00 (0.00) .74 | -0.00 (0.00) .04 | 0.00 (0.00) .76 | -0.00 (0.00) .76 | -0.02 (0.00) <.01 | -0.01 (0.00) .06 | -0.01 (0.00) .01 | -0.00 (0.00) .04 | -0.00 (0.00) .25 | -0.03 (0.01) <.01 | -0.06 (0.01) <.01 | -0.01 (0.00) <.01 | -0.02 (0.00) <.01 | -0.00 (0.00) .20 | --- |
| b | Slope \* education | -0.01 (0.00) .11 | -0.00 (0.01) .49 | -0.00 (0.01) .93 | -0.00 (0.02) .90 | -0.00 (0.00) .63 | -0.00 (0.01) .64 | -0.00 (0.00) .42 | -0.00 (0.00) .52 | -0.00 (0.01) .68 | 0.01 (0.01) .24 | 0.01 (0.01) .54 | -0.00 (0.01) .95 | -0.01 (0.01) .04 | 0.00 (0.00) .89 | -0.03 (0.02) .11 | -0.07 (0.03) .01 | 0.00 (0.01) .81 | -0.01 (0.01) .60 | -0.00 (0.00) .68 | --- |
| b | Slope \* height | -0.18 (0.16) .26 | 0.00 (0.33) .99 | 0.01 (0.29) .96 | -0.33 (1.10) .76 | 0.12 (0.26) .65 | 0.14 (0.27) .60 | -0.04 (0.23) .88 | 0.04 (0.09) .66 | 0.55 (0.38) .15 | -0.24 (0.60) .68 | 0.15 (0.52) .78 | 0.28 (0.39) .48 | 0.07 (0.26) .78 | 0.08 (0.19) .65 | 1.00 (0.81) .22 | 1.05 (1.15) .36 | 0.23 (0.29) .42 | 0.11 (0.56) .84 | 0.03 (0.10) .78 | --- |
| b | Slope \* smoking | 0.00 (0.02) .81 | -0.01 (0.05) .78 | -0.05 (0.04) .24 | 0.11 (0.15) .45 | 0.02 (0.04) .60 | -0.01 (0.04) .66 | -0.04 (0.03) .20 | 0.01 (0.01) .35 | 0.01 (0.05) .81 | -0.08 (0.08) .27 | -0.09 (0.07) .21 | -0.04 (0.05) .44 | 0.02 (0.04) .61 | 0.04 (0.02) .10 | -0.08 (0.11) .46 | -0.25 (0.15) .09 | -0.02 (0.04) .66 | -0.00 (0.08) .98 | 0.01 (0.01) .40 | --- |
| b | Slope \* cardio | -0.00 (0.03) .98 | 0.01 (0.07) .92 | -0.03 (0.06) .60 | -0.51 (0.21) .01 | 0.10 (0.06) .08 | -0.04 (0.05) .51 | -0.07 (0.04) .09 | 0.00 (0.02) .86 | -0.14 (0.09) .11 | -0.04 (0.12) .72 | -0.04 (0.12) .77 | -0.00 (0.09) .97 | -0.02 (0.06) .72 | -0.04 (0.04) .29 | -0.10 (0.17) .54 | -0.07 (0.22) .76 | 0.01 (0.06) .92 | -0.14 (0.12) .27 | -0.00 (0.02) .94 | --- |
| b | Slope \* diabetes | 0.06 (0.03) .02 | 0.09 (0.05) .07 | 0.04 (0.04) .35 | 0.06 (0.18) .75 | 0.03 (0.05) .55 | -0.02 (0.04) .64 | -0.01 (0.04) .83 | 0.03 (0.02) .07 | -0.13 (0.07) .06 | 0.05 (0.10) .58 | 0.21 (0.09) .02 | 0.00 (0.07) .97 | 0.07 (0.05) .16 | -0.03 (0.04) .41 | -0.06 (0.15) .71 | -0.09 (0.19) .64 | -0.05 (0.04) .20 | 0.02 (0.10) .86 | -0.00 (0.02) .76 | --- |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02(0.00) |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00(0.00) |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02(0.00) |
| b | Var (Level) | 0.95 (0.09) <.01 | 1.33 (0.19) <.01 | 0.95 (0.11) <.01 | 46.17 (3.19) <.01 | 2.28 (0.16) <.01 | 2.37 (0.15) <.01 | 1.02 (0.10) <.01 | 0.13 (0.02) <.01 | 4.20 (0.32) <.01 | 11.13 (0.67) <.01 | 10.13 (0.63) <.01 | 2.94 (0.26) <.01 | 0.88 (0.13) <.01 | 3.22 (0.20) <.01 | 32.43 (2.12) <.01 | 62.51 (4.29) <.01 | 2.59 (0.18) <.01 | 9.70 (0.65) <.01 | 0.49 (0.13) <.01 | --- |
| b | Var (Slope) | 0.02 (0.01) <.01 | 0.07 (0.03) .01 | 0.04 (0.02) .02 | 1.10 (0.24) <.01 | 0.03 (0.02) .05 | 0.02 (0.01) .10 | 0.03 (0.01) .03 | 0.01 (0.00) .02 | 0.01 (0.03) .73 | 0.29 (0.06) <.01 | 0.23 (0.06) <.01 | 0.06 (0.03) .04 | 0.06 (0.03) .08 | 0.02 (0.01) .06 | 0.37 (0.15) .02 | 1.17 (0.33) <.01 | 0.04 (0.02) .02 | 0.29 (0.07) <.01 | 0.00 (0.01) .89 | --- |
| b | Var (Residual) | 0.43 (0.02) <.01 | 2.38 (0.13) <.01 | 1.95 (0.07) <.01 | 21.52 (0.79) <.01 | 1.63 (0.06) <.01 | 1.61 (0.06) <.01 | 1.24 (0.06) <.01 | 0.19 (0.01) <.01 | 3.88 (0.16) <.01 | 5.66 (0.20) <.01 | 5.59 (0.21) <.01 | 3.04 (0.18) <.01 | 1.51 (0.07) <.01 | 0.67 (0.04) <.01 | 15.14 (0.82) <.01 | 21.97 (1.27) <.01 | 1.76 (0.08) <.01 | 5.89 (0.20) <.01 | 0.33 (0.06) <.01 | --- |
| a | Covar (Level, Slope) | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 | -0.00 (0.00) .04 | -0.00 (0.00) .04 | -0.00 (0.00) .04 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 | -0.00 (0.00) .04 | -0.00 (0.00) .04 | -0.00 (0.00) .03 | -0.00 (0.00) .04 | -0.00 (0.00) .04 | -0.00 (0.00) .04 | -0.00 (0.00) .04 | -0.00 (0.00) .03 | -0.00(0.00) |
| b | Covar (Level, Slope) | -0.09 (0.02) <.01 | 0.02 (0.06) .70 | -0.04 (0.04) .31 | -0.15 (0.63) .81 | -0.07 (0.04) .06 | -0.02 (0.03) .50 | -0.07 (0.03) .01 | -0.01 (0.01) .04 | 0.07 (0.08) .36 | -0.05 (0.15) .72 | -0.30 (0.14) .04 | -0.08 (0.07) .29 | -0.01 (0.04) .82 | -0.03 (0.03) .40 | -0.28 (0.43) .51 | 0.76 (0.82) .36 | 0.01 (0.04) .73 | 0.09 (0.16) .60 | -0.00 (0.03) .96 | --- |
|  | Correlation of Levels | 0.177 | 0.018 | 0.078 | 0.186 | 0.260 | 0.103 | 0.17 | 0.154 | 0.263 | 0.1034 | 0.106 | 0.2456 | 0.228 | 0.088 | 0.115 | 0.236 | 0.197 | 0.2771 | 0.089 | 0.16(0.08) |
|  | Correlation of Slopes | 0.200 | 0.115 | 0.158 | 0.302 | 0.354 | 0.000 | 0.00 | 0.000 | 0.000 | 0.2911 | 0.326 | 0.0000 | 0.130 | 0.000 | 0.209 | 0.058 | 0.474 | 0.2337 | 0.000 | 0.15(0.15) |
|  | Correlation of Residuals | -0.011 | 0.039 | 0.037 | -0.024 | -0.018 | 0.029 | 0.00 | 0.034 | 0.015 | 0.0031 | 0.044 | 0.0085 | 0.073 | 0.082 | 0.056 | 0.062 | -0.017 | -0.0061 | 0.000 | 0.02(0.03) |
|  | N | 935 | 935 | 935 | 935 | 935 | 935 | 935 | 935 | 935 | 935 | 935 | 935 | 935 | 933 | 935 | 935 | 935 | 935 | 935 | 934.89(0.46) |
|  | occasions | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4.00(0.00) |
|  | parameters | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41.00(0.00) |
|  | LL | -3,384 | -6,053 | -5,589 | -10,393 | -5,591 | -5,610 | -4,852 | -1,560 | -6,859 | -7,968 | -7,876 | -5,955 | -5,223 | -4,465 | -9,476 | -10,292 | -5,748 | -7,947 | -2,776 | -6,190(2,390) |
|  | AIC | 6,851 | 12,188 | 11,261 | 20,867 | 11,264 | 11,301 | 9,786 | 3,203 | 13,799 | 16,018 | 15,833 | 11,992 | 10,527 | 9,012 | 19,033 | 20,666 | 11,578 | 15,977 | 5,633 | 12,463(4,780) |
|  | BIC | 7,049 | 12,386 | 11,459 | 21,066 | 11,462 | 11,500 | 9,985 | 3,401 | 13,998 | 16,217 | 16,032 | 12,191 | 10,726 | 9,210 | 19,232 | 20,864 | 11,777 | 16,175 | 5,832 | 12,661(4,780) |

## bnt

Gender = *female*; Process (a) = *gait*; Process (b) = *bnt*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.04 (0.01) <.01 | 0.04 (0.01) <.01 | 0.03 (0.01) <.01 | 0.02 (0.01) <.01 |
| ab | Covar (Slopes) | 0.00 (0.00) .03 | 0.00 (0.00) .04 | 0.00 (0.00) .04 | 0.00 (0.00) .10 |
| ab | Covar (Residuals) | -0.00 (0.00) .47 | -0.00 (0.00) .45 | -0.00 (0.00) .46 | -0.00 (0.00) .69 |
| er | Corr (Levels) | 0.26 (0.04) <.01 | 0.22 (0.04) <.01 | 0.20 (0.04) <.01 | 0.18 (0.04) <.01 |
| er | Corr (Slopes) | 0.33 (0.15) .03 | 0.32 (0.15) .04 | 0.32 (0.16) .04 | 0.28 (0.17) .11 |
| er | Corr (Residuals) | -0.02 (0.02) .47 | -0.02 (0.02) .45 | -0.02 (0.02) .46 | -0.01 (0.02) .69 |
| a | Level | 0.68 (0.01) <.01 | 0.60 (0.02) <.01 | 0.60 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .66 | 0.00 (0.01) .71 | -0.00 (0.01) .84 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .17 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .21 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .02 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .05 |
| a | Slope \* education | --- | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .03 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .59 | -0.03 (0.04) .43 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .45 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .25 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 14.19 (0.06) <.01 | 13.41 (0.13) <.01 | 13.46 (0.13) <.01 | 13.59 (0.15) <.01 |
| b | Slope | 0.04 (0.01) <.01 | 0.08 (0.04) .02 | 0.08 (0.04) .02 | 0.07 (0.04) .07 |
| b | Level \* age | -0.03 (0.00) <.01 | -0.03 (0.00) <.01 | -0.02 (0.00) <.01 | -0.03 (0.00) <.01 |
| b | Level \* education | --- | 0.10 (0.01) <.01 | 0.10 (0.01) <.01 | 0.09 (0.01) <.01 |
| b | Level \* height | --- | --- | 1.88 (0.57) <.01 | 2.33 (0.60) <.01 |
| b | Level \* smoking | --- | --- | --- | 0.03 (0.07) .71 |
| b | Level \* cardio | --- | --- | --- | 0.09 (0.11) .43 |
| b | Level \* diabetes | --- | --- | --- | -0.22 (0.11) .04 |
| b | Slope \* age | -0.00 (0.00) .54 | -0.00 (0.00) .48 | -0.00 (0.00) .46 | -0.00 (0.00) .66 |
| b | Slope \* education | --- | -0.01 (0.00) .14 | -0.00 (0.00) .15 | -0.01 (0.00) .11 |
| b | Slope \* height | --- | --- | -0.10 (0.15) .48 | -0.18 (0.16) .26 |
| b | Slope \* smoking | --- | --- | --- | 0.00 (0.02) .81 |
| b | Slope \* cardio | --- | --- | --- | -0.00 (0.03) .98 |
| b | Slope \* diabetes | --- | --- | --- | 0.06 (0.03) .02 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 1.28 (0.20) <.01 | 1.18 (0.20) <.01 | 1.00 (0.11) <.01 | 0.95 (0.09) <.01 |
| b | Var (Slope) | 0.03 (0.01) <.01 | 0.03 (0.01) <.01 | 0.02 (0.01) <.01 | 0.02 (0.01) <.01 |
| b | Var (Residual) | 0.44 (0.02) <.01 | 0.44 (0.02) <.01 | 0.43 (0.02) <.01 | 0.43 (0.02) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .02 | -0.00 (0.00) .02 | -0.00 (0.00) .03 |
| b | Covar (Level, Slope) | -0.11 (0.03) <.01 | -0.10 (0.03) <.01 | -0.08 (0.02) <.01 | -0.09 (0.02) <.01 |
|  | Correlation of Levels | 0.262 | 0.218 | 0.195 | 0.177 |
|  | Correlation of Slopes | 0.192 | 0.192 | 0.204 | 0.200 |
|  | Correlation of Residuals | -0.023 | -0.023 | -0.012 | -0.011 |
|  | N | 1,030 | 1,030 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -3,934 | -3,886 | -3,778 | -3,384 |
|  | AIC | 7,910 | 7,822 | 7,615 | 6,851 |
|  | BIC | 8,014 | 7,945 | 7,758 | 7,049 |

## bstory\_de

Gender = *female*; Process (a) = *gait*; Process (b) = *bstory\_de*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.01 (0.01) .36 | 0.00 (0.01) .83 | 0.00 (0.01) .88 | 0.00 (0.01) .80 |
| ab | Covar (Slopes) | 0.00 (0.00) .80 | 0.00 (0.00) .78 | 0.00 (0.00) .79 | 0.00 (0.00) .64 |
| ab | Covar (Residuals) | 0.01 (0.00) .10 | 0.01 (0.00) .10 | 0.01 (0.00) .10 | 0.01 (0.00) .11 |
| er | Corr (Levels) | 0.06 (0.07) .35 | 0.01 (0.07) .83 | 0.01 (0.07) .88 | 0.02 (0.07) .80 |
| er | Corr (Slopes) | 0.05 (0.20) .79 | 0.06 (0.21) .78 | 0.06 (0.21) .79 | 0.11 (0.23) .64 |
| er | Corr (Residuals) | 0.04 (0.02) .10 | 0.04 (0.02) .10 | 0.04 (0.02) .10 | 0.04 (0.02) .11 |
| a | Level | 0.69 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .58 | 0.00 (0.01) .64 | -0.00 (0.01) .91 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .18 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .21 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .02 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .05 |
| a | Slope \* education | --- | -0.00 (0.00) <.01 | -0.00 (0.00) .01 | -0.00 (0.00) .02 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .56 | -0.03 (0.04) .40 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .47 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .24 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 9.68 (0.07) <.01 | 8.97 (0.14) <.01 | 9.02 (0.14) <.01 | 8.92 (0.17) <.01 |
| b | Slope | 0.01 (0.03) .70 | 0.05 (0.05) .33 | 0.05 (0.05) .35 | 0.05 (0.07) .43 |
| b | Level \* age | -0.03 (0.01) <.01 | -0.03 (0.01) <.01 | -0.03 (0.01) <.01 | -0.02 (0.01) <.01 |
| b | Level \* education | --- | 0.09 (0.02) <.01 | 0.09 (0.02) <.01 | 0.09 (0.02) <.01 |
| b | Level \* height | --- | --- | 0.67 (0.74) .36 | 0.72 (0.80) .37 |
| b | Level \* smoking | --- | --- | --- | 0.02 (0.12) .86 |
| b | Level \* cardio | --- | --- | --- | -0.12 (0.19) .52 |
| b | Level \* diabetes | --- | --- | --- | 0.14 (0.14) .32 |
| b | Slope \* age | -0.01 (0.00) .01 | -0.01 (0.00) <.01 | -0.01 (0.00) .01 | -0.01 (0.00) <.01 |
| b | Slope \* education | --- | -0.01 (0.01) .40 | -0.00 (0.01) .41 | -0.00 (0.01) .49 |
| b | Slope \* height | --- | --- | 0.16 (0.34) .65 | 0.00 (0.33) .99 |
| b | Slope \* smoking | --- | --- | --- | -0.01 (0.05) .78 |
| b | Slope \* cardio | --- | --- | --- | 0.01 (0.07) .92 |
| b | Slope \* diabetes | --- | --- | --- | 0.09 (0.05) .07 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 1.37 (0.18) <.01 | 1.29 (0.17) <.01 | 1.25 (0.17) <.01 | 1.33 (0.19) <.01 |
| b | Var (Slope) | 0.07 (0.02) <.01 | 0.07 (0.02) <.01 | 0.07 (0.02) <.01 | 0.07 (0.03) .01 |
| b | Var (Residual) | 2.36 (0.12) <.01 | 2.36 (0.12) <.01 | 2.36 (0.12) <.01 | 2.38 (0.13) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .02 | -0.00 (0.00) .02 | -0.00 (0.00) .03 |
| b | Covar (Level, Slope) | 0.03 (0.06) .58 | 0.03 (0.05) .53 | 0.04 (0.05) .46 | 0.02 (0.06) .70 |
|  | Correlation of Levels | 0.062 | 0.012 | 0.012 | 0.018 |
|  | Correlation of Slopes | 0.000 | 0.000 | 0.000 | 0.115 |
|  | Correlation of Residuals | 0.040 | 0.040 | 0.040 | 0.039 |
|  | N | 1,030 | 1,030 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -6,718 | -6,689 | -6,655 | -6,053 |
|  | AIC | 13,478 | 13,427 | 13,369 | 12,188 |
|  | BIC | 13,582 | 13,551 | 13,512 | 12,386 |

## bstory\_im

Gender = *female*; Process (a) = *gait*; Process (b) = *bstory\_im*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.01 (0.01) .14 | 0.01 (0.01) .38 | 0.01 (0.01) .42 | 0.01 (0.01) .30 |
| ab | Covar (Slopes) | 0.00 (0.00) .44 | 0.00 (0.00) .35 | 0.00 (0.00) .36 | 0.00 (0.00) .28 |
| ab | Covar (Residuals) | 0.01 (0.00) .14 | 0.01 (0.00) .14 | 0.01 (0.00) .14 | 0.01 (0.00) .16 |
| er | Corr (Levels) | 0.10 (0.07) .13 | 0.06 (0.07) .38 | 0.06 (0.07) .41 | 0.07 (0.07) .29 |
| er | Corr (Slopes) | 0.16 (0.21) .44 | 0.20 (0.22) .35 | 0.20 (0.22) .36 | 0.28 (0.26) .28 |
| er | Corr (Residuals) | 0.04 (0.02) .14 | 0.04 (0.02) .14 | 0.04 (0.02) .14 | 0.04 (0.03) .16 |
| a | Level | 0.69 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .56 | 0.00 (0.01) .62 | -0.00 (0.01) .92 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .18 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .22 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .02 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .05 |
| a | Slope \* education | --- | -0.00 (0.00) <.01 | -0.00 (0.00) .01 | -0.00 (0.00) .02 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .54 | -0.03 (0.04) .40 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .45 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .25 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 10.03 (0.07) <.01 | 9.43 (0.13) <.01 | 9.47 (0.13) <.01 | 9.31 (0.16) <.01 |
| b | Slope | -0.01 (0.03) .68 | -0.04 (0.05) .49 | -0.04 (0.05) .46 | 0.03 (0.06) .66 |
| b | Level \* age | -0.03 (0.01) <.01 | -0.03 (0.01) <.01 | -0.03 (0.01) <.01 | -0.02 (0.01) <.01 |
| b | Level \* education | --- | 0.08 (0.01) <.01 | 0.07 (0.01) <.01 | 0.08 (0.02) <.01 |
| b | Level \* height | --- | --- | 0.57 (0.73) .43 | 0.74 (0.79) .35 |
| b | Level \* smoking | --- | --- | --- | 0.10 (0.10) .33 |
| b | Level \* cardio | --- | --- | --- | -0.08 (0.16) .60 |
| b | Level \* diabetes | --- | --- | --- | 0.17 (0.13) .19 |
| b | Slope \* age | -0.00 (0.00) .33 | -0.00 (0.00) .33 | -0.00 (0.00) .35 | -0.00 (0.00) .14 |
| b | Slope \* education | --- | 0.00 (0.01) .58 | 0.00 (0.01) .56 | -0.00 (0.01) .93 |
| b | Slope \* height | --- | --- | 0.10 (0.27) .70 | 0.01 (0.29) .96 |
| b | Slope \* smoking | --- | --- | --- | -0.05 (0.04) .24 |
| b | Slope \* cardio | --- | --- | --- | -0.03 (0.06) .60 |
| b | Slope \* diabetes | --- | --- | --- | 0.04 (0.04) .35 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 1.05 (0.11) <.01 | 0.99 (0.11) <.01 | 0.97 (0.11) <.01 | 0.95 (0.11) <.01 |
| b | Var (Slope) | 0.05 (0.02) <.01 | 0.05 (0.02) <.01 | 0.05 (0.02) <.01 | 0.04 (0.02) .02 |
| b | Var (Residual) | 1.96 (0.07) <.01 | 1.96 (0.07) <.01 | 1.95 (0.07) <.01 | 1.95 (0.07) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .02 | -0.00 (0.00) .02 | -0.00 (0.00) .03 |
| b | Covar (Level, Slope) | -0.05 (0.04) .14 | -0.06 (0.04) .13 | -0.05 (0.04) .16 | -0.04 (0.04) .31 |
|  | Correlation of Levels | 0.096 | 0.061 | 0.055 | 0.078 |
|  | Correlation of Slopes | 0.143 | 0.143 | 0.144 | 0.158 |
|  | Correlation of Residuals | 0.038 | 0.038 | 0.038 | 0.037 |
|  | N | 1,030 | 1,030 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -6,244 | -6,210 | -6,177 | -5,589 |
|  | AIC | 12,529 | 12,469 | 12,412 | 11,261 |
|  | BIC | 12,633 | 12,592 | 12,555 | 11,459 |

## categories

Gender = *female*; Process (a) = *gait*; Process (b) = *categories*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.26 (0.05) <.01 | 0.18 (0.05) <.01 | 0.17 (0.05) <.01 | 0.18 (0.05) <.01 |
| ab | Covar (Slopes) | 0.01 (0.00) .05 | 0.01 (0.00) .04 | 0.01 (0.00) .04 | 0.01 (0.00) .02 |
| ab | Covar (Residuals) | -0.02 (0.01) .29 | -0.02 (0.01) .29 | -0.02 (0.01) .29 | -0.01 (0.02) .32 |
| er | Corr (Levels) | 0.24 (0.04) <.01 | 0.18 (0.05) <.01 | 0.17 (0.05) <.01 | 0.18 (0.05) <.01 |
| er | Corr (Slopes) | 0.29 (0.15) .05 | 0.32 (0.15) .04 | 0.32 (0.15) .04 | 0.39 (0.17) .02 |
| er | Corr (Residuals) | -0.03 (0.02) .28 | -0.02 (0.02) .29 | -0.02 (0.02) .29 | -0.02 (0.02) .32 |
| a | Level | 0.68 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .68 | 0.00 (0.01) .73 | -0.00 (0.01) .76 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .17 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .21 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .01 | -0.00 (0.00) <.01 | -0.00 (0.00) <.01 | -0.00 (0.00) .03 |
| a | Slope \* education | --- | -0.00 (0.00) <.01 | -0.00 (0.00) .01 | -0.00 (0.00) .03 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .55 | -0.03 (0.04) .43 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .43 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .26 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 38.27 (0.41) <.01 | 31.92 (0.67) <.01 | 32.33 (0.66) <.01 | 32.42 (0.80) <.01 |
| b | Slope | 0.05 (0.10) .61 | 0.01 (0.18) .97 | -0.00 (0.18) .98 | 0.06 (0.22) .80 |
| b | Level \* age | -0.29 (0.04) <.01 | -0.27 (0.03) <.01 | -0.26 (0.03) <.01 | -0.26 (0.04) <.01 |
| b | Level \* education | --- | 0.83 (0.08) <.01 | 0.78 (0.08) <.01 | 0.82 (0.08) <.01 |
| b | Level \* height | --- | --- | 12.34 (3.44) <.01 | 12.84 (3.75) <.01 |
| b | Level \* smoking | --- | --- | --- | -0.64 (0.51) .21 |
| b | Level \* cardio | --- | --- | --- | -0.64 (0.74) .38 |
| b | Level \* diabetes | --- | --- | --- | -0.37 (0.64) .57 |
| b | Slope \* age | -0.03 (0.01) <.01 | -0.03 (0.01) <.01 | -0.03 (0.01) <.01 | -0.03 (0.01) <.01 |
| b | Slope \* education | --- | 0.01 (0.02) .78 | 0.01 (0.02) .78 | -0.00 (0.02) .90 |
| b | Slope \* height | --- | --- | 0.05 (1.01) .96 | -0.33 (1.10) .76 |
| b | Slope \* smoking | --- | --- | --- | 0.11 (0.15) .45 |
| b | Slope \* cardio | --- | --- | --- | -0.51 (0.21) .01 |
| b | Slope \* diabetes | --- | --- | --- | 0.06 (0.18) .75 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 53.16 (3.32) <.01 | 46.38 (3.06) <.01 | 45.27 (3.01) <.01 | 46.17 (3.19) <.01 |
| b | Var (Slope) | 1.02 (0.22) <.01 | 1.02 (0.22) <.01 | 1.02 (0.22) <.01 | 1.10 (0.24) <.01 |
| b | Var (Residual) | 21.54 (0.74) <.01 | 21.53 (0.74) <.01 | 21.56 (0.74) <.01 | 21.52 (0.79) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 |
| b | Covar (Level, Slope) | 0.19 (0.64) .77 | 0.13 (0.59) .83 | 0.16 (0.59) .79 | -0.15 (0.63) .81 |
|  | Correlation of Levels | 0.239 | 0.179 | 0.167 | 0.186 |
|  | Correlation of Slopes | 0.250 | 0.250 | 0.250 | 0.302 |
|  | Correlation of Residuals | -0.026 | -0.026 | -0.026 | -0.024 |
|  | N | 1,030 | 1,030 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -11,579 | -11,510 | -11,463 | -10,393 |
|  | AIC | 23,199 | 23,071 | 22,985 | 20,867 |
|  | BIC | 23,303 | 23,194 | 23,128 | 21,066 |

## digit\_b

Gender = *female*; Process (a) = *gait*; Process (b) = *digit\_b*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.07 (0.01) <.01 | 0.05 (0.01) <.01 | 0.05 (0.01) <.01 | 0.06 (0.01) <.01 |
| ab | Covar (Slopes) | 0.00 (0.00) .13 | 0.00 (0.00) .12 | 0.00 (0.00) .12 | 0.00 (0.00) .08 |
| ab | Covar (Residuals) | 0.00 (0.00) .97 | 0.00 (0.00) .99 | 0.00 (0.00) .99 | -0.00 (0.00) .47 |
| er | Corr (Levels) | 0.27 (0.05) <.01 | 0.23 (0.05) <.01 | 0.21 (0.05) <.01 | 0.26 (0.05) <.01 |
| er | Corr (Slopes) | 0.36 (0.24) .13 | 0.38 (0.24) .12 | 0.37 (0.24) .12 | 0.48 (0.29) .09 |
| er | Corr (Residuals) | 0.00 (0.02) .97 | 0.00 (0.02) .99 | 0.00 (0.02) .99 | -0.02 (0.03) .47 |
| a | Level | 0.68 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .75 | 0.00 (0.01) .79 | -0.00 (0.01) .74 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.23 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .19 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .20 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .04 |
| a | Slope \* education | --- | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .04 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .60 | -0.03 (0.04) .46 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .41 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .28 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 6.36 (0.10) <.01 | 5.15 (0.16) <.01 | 5.25 (0.16) <.01 | 5.16 (0.20) <.01 |
| b | Slope | -0.03 (0.02) .23 | -0.02 (0.04) .68 | -0.02 (0.04) .61 | -0.03 (0.06) .63 |
| b | Level \* age | -0.01 (0.01) .42 | -0.00 (0.01) .70 | 0.00 (0.01) .87 | 0.01 (0.01) .48 |
| b | Level \* education | --- | 0.16 (0.02) <.01 | 0.14 (0.02) <.01 | 0.15 (0.02) <.01 |
| b | Level \* height | --- | --- | 3.46 (0.84) <.01 | 2.82 (0.88) <.01 |
| b | Level \* smoking | --- | --- | --- | -0.02 (0.12) .87 |
| b | Level \* cardio | --- | --- | --- | -0.38 (0.18) .04 |
| b | Level \* diabetes | --- | --- | --- | 0.17 (0.16) .28 |
| b | Slope \* age | 0.00 (0.00) .96 | 0.00 (0.00) .99 | 0.00 (0.00) .97 | -0.00 (0.00) .80 |
| b | Slope \* education | --- | -0.00 (0.00) .80 | -0.00 (0.00) .87 | -0.00 (0.00) .63 |
| b | Slope \* height | --- | --- | -0.07 (0.24) .78 | 0.12 (0.26) .65 |
| b | Slope \* smoking | --- | --- | --- | 0.02 (0.04) .60 |
| b | Slope \* cardio | --- | --- | --- | 0.10 (0.06) .08 |
| b | Slope \* diabetes | --- | --- | --- | 0.03 (0.05) .55 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 2.66 (0.17) <.01 | 2.42 (0.16) <.01 | 2.37 (0.16) <.01 | 2.28 (0.16) <.01 |
| b | Var (Slope) | 0.03 (0.01) .02 | 0.03 (0.01) .02 | 0.03 (0.01) .02 | 0.03 (0.02) .05 |
| b | Var (Residual) | 1.62 (0.06) <.01 | 1.61 (0.06) <.01 | 1.62 (0.06) <.01 | 1.63 (0.06) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 |
| b | Covar (Level, Slope) | -0.10 (0.04) .01 | -0.09 (0.04) .01 | -0.09 (0.04) .01 | -0.07 (0.04) .06 |
|  | Correlation of Levels | 0.27 | 0.23 | 0.21 | 0.260 |
|  | Correlation of Slopes | 0.35 | 0.34 | 0.34 | 0.354 |
|  | Correlation of Residuals | 0.00 | 0.00 | 0.00 | -0.018 |
|  | N | 1,030 | 1,030 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -6,243 | -6,192 | -6,160 | -5,591 |
|  | AIC | 12,528 | 12,433 | 12,378 | 11,264 |
|  | BIC | 12,632 | 12,557 | 12,521 | 11,462 |

## digit\_f

Gender = *female*; Process (a) = *gait*; Process (b) = *digit\_f*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.04 (0.01) <.01 | 0.03 (0.01) .02 | 0.02 (0.01) .04 | 0.02 (0.01) .06 |
| ab | Covar (Slopes) | 0.00 (0.00) .50 | 0.00 (0.00) .45 | 0.00 (0.00) .46 | 0.00 (0.00) .76 |
| ab | Covar (Residuals) | 0.00 (0.00) .29 | 0.00 (0.00) .31 | 0.00 (0.00) .30 | 0.00 (0.00) .28 |
| er | Corr (Levels) | 0.16 (0.05) <.01 | 0.12 (0.05) .01 | 0.11 (0.05) .03 | 0.10 (0.05) .05 |
| er | Corr (Slopes) | 0.17 (0.27) .51 | 0.20 (0.27) .46 | 0.20 (0.28) .47 | 0.09 (0.30) .76 |
| er | Corr (Residuals) | 0.02 (0.02) .29 | 0.02 (0.02) .31 | 0.02 (0.02) .30 | 0.03 (0.03) .27 |
| a | Level | 0.69 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .64 | 0.00 (0.01) .69 | -0.00 (0.01) .82 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.22 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .17 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .21 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .04 |
| a | Slope \* education | --- | -0.00 (0.00) <.01 | -0.00 (0.00) .01 | -0.00 (0.00) .03 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .60 | -0.03 (0.04) .45 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .42 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .28 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 8.36 (0.09) <.01 | 7.37 (0.17) <.01 | 7.45 (0.17) <.01 | 7.36 (0.22) <.01 |
| b | Slope | -0.03 (0.02) .16 | -0.01 (0.05) .84 | -0.01 (0.05) .83 | -0.00 (0.06) .98 |
| b | Level \* age | -0.01 (0.01) .34 | -0.00 (0.01) .54 | 0.00 (0.01) .97 | 0.00 (0.01) .98 |
| b | Level \* education | --- | 0.13 (0.02) <.01 | 0.12 (0.02) <.01 | 0.12 (0.02) <.01 |
| b | Level \* height | --- | --- | 2.85 (0.85) <.01 | 2.50 (0.91) .01 |
| b | Level \* smoking | --- | --- | --- | -0.01 (0.12) .94 |
| b | Level \* cardio | --- | --- | --- | 0.22 (0.19) .24 |
| b | Level \* diabetes | --- | --- | --- | 0.16 (0.17) .34 |
| b | Slope \* age | 0.00 (0.00) .81 | -0.00 (0.00) .77 | 0.00 (0.00) .86 | 0.00 (0.00) .74 |
| b | Slope \* education | --- | -0.00 (0.01) .64 | -0.00 (0.01) .63 | -0.00 (0.01) .64 |
| b | Slope \* height | --- | --- | 0.01 (0.25) .95 | 0.14 (0.27) .60 |
| b | Slope \* smoking | --- | --- | --- | -0.01 (0.04) .66 |
| b | Slope \* cardio | --- | --- | --- | -0.04 (0.05) .51 |
| b | Slope \* diabetes | --- | --- | --- | -0.02 (0.04) .64 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 2.55 (0.15) <.01 | 2.40 (0.14) <.01 | 2.35 (0.14) <.01 | 2.37 (0.15) <.01 |
| b | Var (Slope) | 0.02 (0.01) .09 | 0.02 (0.01) .08 | 0.02 (0.01) .09 | 0.02 (0.01) .10 |
| b | Var (Residual) | 1.62 (0.06) <.01 | 1.62 (0.06) <.01 | 1.62 (0.06) <.01 | 1.61 (0.06) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 |
| b | Covar (Level, Slope) | -0.02 (0.03) .51 | -0.02 (0.03) .55 | -0.02 (0.03) .52 | -0.02 (0.03) .50 |
|  | Correlation of Levels | 0.161 | 0.122 | 0.110 | 0.103 |
|  | Correlation of Slopes | 0.213 | 0.213 | 0.213 | 0.000 |
|  | Correlation of Residuals | 0.024 | 0.024 | 0.024 | 0.029 |
|  | N | 1,030 | 1,030 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -6,262 | -6,225 | -6,195 | -5,610 |
|  | AIC | 12,567 | 12,499 | 12,449 | 11,301 |
|  | BIC | 12,670 | 12,623 | 12,592 | 11,500 |

## digit\_o

Gender = *female*; Process (a) = *gait*; Process (b) = *digit\_o*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.03 (0.01) <.01 | 0.02 (0.01) .01 | 0.02 (0.01) .01 | 0.02 (0.01) <.01 |
| ab | Covar (Slopes) | 0.00 (0.00) .76 | 0.00 (0.00) .80 | 0.00 (0.00) .80 | 0.00 (0.00) .74 |
| ab | Covar (Residuals) | 0.00 (0.00) .93 | 0.00 (0.00) .88 | 0.00 (0.00) .89 | 0.00 (0.00) .92 |
| er | Corr (Levels) | 0.20 (0.05) <.01 | 0.15 (0.05) .01 | 0.14 (0.06) .01 | 0.17 (0.06) <.01 |
| er | Corr (Slopes) | -0.07 (0.23) .76 | -0.06 (0.23) .80 | -0.06 (0.23) .80 | -0.08 (0.25) .74 |
| er | Corr (Residuals) | -0.00 (0.02) .93 | -0.00 (0.02) .88 | -0.00 (0.02) .89 | 0.00 (0.02) .92 |
| a | Level | 0.69 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .73 | 0.00 (0.01) .78 | -0.00 (0.01) .78 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .18 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .21 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .02 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .05 |
| a | Slope \* education | --- | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .04 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .58 | -0.03 (0.04) .44 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .45 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .25 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 7.37 (0.07) <.01 | 6.43 (0.14) <.01 | 6.48 (0.14) <.01 | 6.51 (0.16) <.01 |
| b | Slope | 0.02 (0.02) .30 | 0.05 (0.04) .22 | 0.05 (0.04) .21 | 0.09 (0.05) .07 |
| b | Level \* age | -0.01 (0.01) .18 | -0.00 (0.01) .34 | -0.00 (0.01) .57 | -0.00 (0.01) .65 |
| b | Level \* education | --- | 0.12 (0.01) <.01 | 0.12 (0.02) <.01 | 0.12 (0.02) <.01 |
| b | Level \* height | --- | --- | 1.76 (0.65) .01 | 1.90 (0.69) .01 |
| b | Level \* smoking | --- | --- | --- | -0.04 (0.09) .64 |
| b | Level \* cardio | --- | --- | --- | -0.05 (0.14) .71 |
| b | Level \* diabetes | --- | --- | --- | 0.07 (0.13) .59 |
| b | Slope \* age | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 | -0.00 (0.00) .04 |
| b | Slope \* education | --- | -0.00 (0.00) .44 | -0.00 (0.00) .40 | -0.00 (0.00) .42 |
| b | Slope \* height | --- | --- | 0.13 (0.22) .54 | -0.04 (0.23) .88 |
| b | Slope \* smoking | --- | --- | --- | -0.04 (0.03) .20 |
| b | Slope \* cardio | --- | --- | --- | -0.07 (0.04) .09 |
| b | Slope \* diabetes | --- | --- | --- | -0.01 (0.04) .83 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 1.20 (0.11) <.01 | 1.06 (0.10) <.01 | 1.04 (0.10) <.01 | 1.02 (0.10) <.01 |
| b | Var (Slope) | 0.02 (0.01) .04 | 0.02 (0.01) .04 | 0.02 (0.01) .04 | 0.03 (0.01) .03 |
| b | Var (Residual) | 1.28 (0.06) <.01 | 1.28 (0.06) <.01 | 1.28 (0.06) <.01 | 1.24 (0.06) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 |
| b | Covar (Level, Slope) | -0.07 (0.03) .01 | -0.07 (0.03) .02 | -0.07 (0.03) .02 | -0.07 (0.03) .01 |
|  | Correlation of Levels | 0.2 | 0.14 | 0.13 | 0.17 |
|  | Correlation of Slopes | 0.0 | 0.00 | 0.00 | 0.00 |
|  | Correlation of Residuals | 0.0 | 0.00 | 0.00 | 0.00 |
|  | N | 1,030 | 1,030 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -5,475 | -5,417 | -5,391 | -4,852 |
|  | AIC | 10,993 | 10,885 | 10,840 | 9,786 |
|  | BIC | 11,096 | 11,008 | 10,983 | 9,985 |

## ideas

Gender = *female*; Process (a) = *gait*; Process (b) = *ideas*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 |
| ab | Covar (Slopes) | 0.00 (0.00) .29 | 0.00 (0.00) .32 | 0.00 (0.00) .32 | 0.00 (0.00) .27 |
| ab | Covar (Residuals) | 0.00 (0.00) .40 | 0.00 (0.00) .41 | 0.00 (0.00) .40 | 0.00 (0.00) .26 |
| er | Corr (Levels) | 0.21 (0.06) <.01 | 0.18 (0.06) <.01 | 0.17 (0.06) <.01 | 0.16 (0.06) .01 |
| er | Corr (Slopes) | 0.21 (0.20) .29 | 0.20 (0.20) .33 | 0.20 (0.21) .33 | 0.22 (0.20) .27 |
| er | Corr (Residuals) | 0.02 (0.02) .40 | 0.02 (0.02) .41 | 0.02 (0.02) .40 | 0.03 (0.02) .26 |
| a | Level | 0.69 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .60 | 0.00 (0.01) .64 | -0.00 (0.01) .91 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .17 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .20 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .04 |
| a | Slope \* education | --- | -0.00 (0.00) <.01 | -0.00 (0.00) .01 | -0.00 (0.00) .03 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .59 | -0.03 (0.04) .44 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .42 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .25 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 7.67 (0.03) <.01 | 7.52 (0.05) <.01 | 7.52 (0.05) <.01 | 7.58 (0.06) <.01 |
| b | Slope | 0.02 (0.01) .09 | 0.03 (0.02) .08 | 0.03 (0.02) .05 | 0.02 (0.02) .40 |
| b | Level \* age | 0.00 (0.00) .35 | 0.00 (0.00) .27 | 0.00 (0.00) .21 | 0.00 (0.00) .26 |
| b | Level \* education | --- | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.01 (0.00) <.01 |
| b | Level \* height | --- | --- | 0.24 (0.24) .31 | 0.23 (0.26) .37 |
| b | Level \* smoking | --- | --- | --- | -0.02 (0.03) .47 |
| b | Level \* cardio | --- | --- | --- | -0.03 (0.05) .59 |
| b | Level \* diabetes | --- | --- | --- | -0.10 (0.05) .06 |
| b | Slope \* age | 0.00 (0.00) .62 | 0.00 (0.00) .58 | 0.00 (0.00) .88 | 0.00 (0.00) .76 |
| b | Slope \* education | --- | -0.00 (0.00) .27 | -0.00 (0.00) .15 | -0.00 (0.00) .52 |
| b | Slope \* height | --- | --- | 0.11 (0.09) .21 | 0.04 (0.09) .66 |
| b | Slope \* smoking | --- | --- | --- | 0.01 (0.01) .35 |
| b | Slope \* cardio | --- | --- | --- | 0.00 (0.02) .86 |
| b | Slope \* diabetes | --- | --- | --- | 0.03 (0.02) .07 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 0.12 (0.02) <.01 | 0.12 (0.02) <.01 | 0.12 (0.02) <.01 | 0.13 (0.02) <.01 |
| b | Var (Slope) | 0.00 (0.00) .03 | 0.00 (0.00) .03 | 0.00 (0.00) .04 | 0.01 (0.00) .02 |
| b | Var (Residual) | 0.20 (0.01) <.01 | 0.20 (0.01) <.01 | 0.20 (0.01) <.01 | 0.19 (0.01) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .02 | -0.00 (0.00) .02 | -0.00 (0.00) .03 |
| b | Covar (Level, Slope) | -0.01 (0.01) .06 | -0.01 (0.01) .07 | -0.01 (0.01) .06 | -0.01 (0.01) .04 |
|  | Correlation of Levels | 0.205 | 0.174 | 0.173 | 0.154 |
|  | Correlation of Slopes | 0.000 | 0.000 | 0.000 | 0.000 |
|  | Correlation of Residuals | 0.017 | 0.017 | 0.017 | 0.034 |
|  | N | 1,030 | 1,030 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -1,801 | -1,780 | -1,752 | -1,560 |
|  | AIC | 3,643 | 3,610 | 3,562 | 3,203 |
|  | BIC | 3,747 | 3,734 | 3,705 | 3,401 |

## line

Gender = *female*; Process (a) = *gait*; Process (b) = *line*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.11 (0.02) <.01 | 0.08 (0.02) <.01 | 0.07 (0.02) <.01 | 0.08 (0.02) <.01 |
| ab | Covar (Slopes) | 0.00 (0.00) .99 | 0.00 (0.00) .95 | 0.00 (0.00) .96 | 0.00 (0.00) .89 |
| ab | Covar (Residuals) | 0.01 (0.01) .33 | 0.01 (0.01) .33 | 0.01 (0.01) .33 | 0.00 (0.01) .54 |
| er | Corr (Levels) | 0.30 (0.05) <.01 | 0.24 (0.05) <.01 | 0.23 (0.05) <.01 | 0.26 (0.06) <.01 |
| er | Corr (Slopes) | 0.00 (0.36) .99 | -0.02 (0.37) .95 | -0.02 (0.38) .96 | -0.08 (0.64) .90 |
| er | Corr (Residuals) | 0.02 (0.02) .33 | 0.02 (0.02) .33 | 0.02 (0.02) .33 | 0.01 (0.02) .54 |
| a | Level | 0.68 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .69 | 0.00 (0.01) .74 | -0.00 (0.01) .80 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .16 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .22 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .04 |
| a | Slope \* education | --- | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .04 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .57 | -0.03 (0.04) .44 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .44 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .28 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 9.78 (0.14) <.01 | 7.66 (0.26) <.01 | 7.75 (0.26) <.01 | 7.99 (0.30) <.01 |
| b | Slope | 0.04 (0.03) .27 | 0.08 (0.07) .26 | 0.09 (0.07) .23 | 0.08 (0.09) .37 |
| b | Level \* age | -0.02 (0.01) .14 | -0.01 (0.01) .29 | -0.01 (0.01) .56 | -0.01 (0.01) .31 |
| b | Level \* education | --- | 0.28 (0.03) <.01 | 0.26 (0.03) <.01 | 0.25 (0.03) <.01 |
| b | Level \* height | --- | --- | 2.87 (1.21) .02 | 2.71 (1.26) .03 |
| b | Level \* smoking | --- | --- | --- | -0.23 (0.18) .19 |
| b | Level \* cardio | --- | --- | --- | 0.07 (0.26) .78 |
| b | Level \* diabetes | --- | --- | --- | 0.07 (0.24) .78 |
| b | Slope \* age | -0.00 (0.00) .35 | -0.00 (0.00) .32 | -0.00 (0.00) .48 | -0.00 (0.00) .76 |
| b | Slope \* education | --- | -0.01 (0.01) .46 | -0.01 (0.01) .36 | -0.00 (0.01) .68 |
| b | Slope \* height | --- | --- | 0.59 (0.35) .09 | 0.55 (0.38) .15 |
| b | Slope \* smoking | --- | --- | --- | 0.01 (0.05) .81 |
| b | Slope \* cardio | --- | --- | --- | -0.14 (0.09) .11 |
| b | Slope \* diabetes | --- | --- | --- | -0.13 (0.07) .06 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 5.37 (0.37) <.01 | 4.62 (0.33) <.01 | 4.51 (0.32) <.01 | 4.20 (0.32) <.01 |
| b | Var (Slope) | 0.03 (0.03) .38 | 0.03 (0.03) .39 | 0.02 (0.03) .42 | 0.01 (0.03) .73 |
| b | Var (Residual) | 3.80 (0.15) <.01 | 3.79 (0.15) <.01 | 3.79 (0.15) <.01 | 3.88 (0.16) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .02 | -0.00 (0.00) .02 | -0.00 (0.00) .03 |
| b | Covar (Level, Slope) | 0.02 (0.08) .82 | 0.04 (0.08) .65 | 0.04 (0.08) .62 | 0.07 (0.08) .36 |
|  | Correlation of Levels | 0.302 | 0.242 | 0.232 | 0.263 |
|  | Correlation of Slopes | 0.000 | 0.000 | 0.000 | 0.000 |
|  | Correlation of Residuals | 0.024 | 0.024 | 0.024 | 0.015 |
|  | N | 1,029 | 1,029 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -7,655 | -7,591 | -7,564 | -6,859 |
|  | AIC | 15,351 | 15,232 | 15,185 | 13,799 |
|  | BIC | 15,455 | 15,356 | 15,328 | 13,998 |

## logic\_de

Gender = *female*; Process (a) = *gait*; Process (b) = *logic\_de*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.08 (0.03) <.01 | 0.05 (0.02) .04 | 0.04 (0.02) .06 | 0.05 (0.02) .05 |
| ab | Covar (Slopes) | 0.00 (0.00) .03 | 0.00 (0.00) .02 | 0.00 (0.00) .02 | 0.00 (0.00) .03 |
| ab | Covar (Residuals) | -0.00 (0.01) .88 | -0.00 (0.01) .87 | -0.00 (0.01) .86 | 0.00 (0.01) .92 |
| er | Corr (Levels) | 0.16 (0.05) <.01 | 0.10 (0.05) .03 | 0.09 (0.05) .06 | 0.10 (0.05) .04 |
| er | Corr (Slopes) | 0.34 (0.15) .02 | 0.39 (0.15) .01 | 0.39 (0.15) .01 | 0.40 (0.17) .02 |
| er | Corr (Residuals) | -0.00 (0.02) .88 | -0.00 (0.02) .87 | -0.00 (0.02) .86 | 0.00 (0.02) .92 |
| a | Level | 0.69 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .66 | 0.00 (0.01) .72 | -0.00 (0.01) .84 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .17 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .21 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) <.01 | -0.00 (0.00) .04 |
| a | Slope \* education | --- | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .03 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .51 | -0.03 (0.04) .37 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .42 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .25 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 11.16 (0.18) <.01 | 8.51 (0.32) <.01 | 8.66 (0.32) <.01 | 8.47 (0.41) <.01 |
| b | Slope | 0.44 (0.05) <.01 | 0.28 (0.10) .01 | 0.27 (0.10) .01 | 0.39 (0.12) <.01 |
| b | Level \* age | -0.12 (0.02) <.01 | -0.11 (0.02) <.01 | -0.10 (0.02) <.01 | -0.10 (0.02) <.01 |
| b | Level \* education | --- | 0.35 (0.04) <.01 | 0.32 (0.04) <.01 | 0.35 (0.04) <.01 |
| b | Level \* height | --- | --- | 6.03 (1.75) <.01 | 5.52 (1.75) <.01 |
| b | Level \* smoking | --- | --- | --- | 0.08 (0.26) .76 |
| b | Level \* cardio | --- | --- | --- | -0.06 (0.42) .89 |
| b | Level \* diabetes | --- | --- | --- | 0.20 (0.32) .54 |
| b | Slope \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.02 (0.00) <.01 |
| b | Slope \* education | --- | 0.02 (0.01) .06 | 0.02 (0.01) .05 | 0.01 (0.01) .24 |
| b | Slope \* height | --- | --- | -0.19 (0.55) .73 | -0.24 (0.60) .68 |
| b | Slope \* smoking | --- | --- | --- | -0.08 (0.08) .27 |
| b | Slope \* cardio | --- | --- | --- | -0.04 (0.12) .72 |
| b | Slope \* diabetes | --- | --- | --- | 0.05 (0.10) .58 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 12.27 (0.66) <.01 | 11.10 (0.64) <.01 | 10.94 (0.63) <.01 | 11.13 (0.67) <.01 |
| b | Var (Slope) | 0.28 (0.06) <.01 | 0.27 (0.06) <.01 | 0.28 (0.06) <.01 | 0.29 (0.06) <.01 |
| b | Var (Residual) | 5.70 (0.20) <.01 | 5.69 (0.20) <.01 | 5.67 (0.20) <.01 | 5.66 (0.20) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .02 | -0.00 (0.00) .03 | -0.00 (0.00) .03 |
| b | Covar (Level, Slope) | 0.07 (0.14) .64 | 0.00 (0.14) .99 | 0.01 (0.14) .96 | -0.05 (0.15) .72 |
|  | Correlation of Levels | 0.1563 | 0.1012 | 0.0897 | 0.1034 |
|  | Correlation of Slopes | 0.3004 | 0.3021 | 0.3010 | 0.2911 |
|  | Correlation of Residuals | -0.0032 | -0.0032 | -0.0032 | 0.0031 |
|  | N | 1,029 | 1,029 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -8,883 | -8,822 | -8,784 | -7,968 |
|  | AIC | 17,808 | 17,694 | 17,625 | 16,018 |
|  | BIC | 17,912 | 17,818 | 17,768 | 16,217 |

## logic\_im

Gender = *female*; Process (a) = *gait*; Process (b) = *logic\_im*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.08 (0.02) <.01 | 0.05 (0.02) .03 | 0.04 (0.02) .05 | 0.05 (0.02) .04 |
| ab | Covar (Slopes) | 0.00 (0.00) .02 | 0.00 (0.00) .01 | 0.00 (0.00) .01 | 0.00 (0.00) .02 |
| ab | Covar (Residuals) | 0.01 (0.01) .15 | 0.01 (0.01) .15 | 0.01 (0.01) .15 | 0.01 (0.01) .07 |
| er | Corr (Levels) | 0.16 (0.05) <.01 | 0.11 (0.05) .03 | 0.10 (0.05) .04 | 0.11 (0.05) .04 |
| er | Corr (Slopes) | 0.39 (0.15) .01 | 0.43 (0.15) <.01 | 0.44 (0.15) <.01 | 0.43 (0.17) .01 |
| er | Corr (Residuals) | 0.03 (0.02) .14 | 0.03 (0.02) .14 | 0.03 (0.02) .15 | 0.04 (0.02) .06 |
| a | Level | 0.69 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .65 | 0.00 (0.01) .71 | -0.00 (0.01) .87 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .18 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .20 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .02 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .04 |
| a | Slope \* education | --- | -0.00 (0.00) <.01 | -0.00 (0.00) .01 | -0.00 (0.00) .03 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .53 | -0.03 (0.04) .40 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .40 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .23 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 12.76 (0.18) <.01 | 10.22 (0.32) <.01 | 10.31 (0.32) <.01 | 10.31 (0.42) <.01 |
| b | Slope | 0.33 (0.05) <.01 | 0.24 (0.10) .02 | 0.24 (0.10) .02 | 0.31 (0.12) .01 |
| b | Level \* age | -0.11 (0.02) <.01 | -0.10 (0.01) <.01 | -0.10 (0.01) <.01 | -0.10 (0.02) <.01 |
| b | Level \* education | --- | 0.33 (0.04) <.01 | 0.32 (0.04) <.01 | 0.33 (0.04) <.01 |
| b | Level \* height | --- | --- | 4.86 (1.66) <.01 | 4.27 (1.65) .01 |
| b | Level \* smoking | --- | --- | --- | -0.11 (0.25) .66 |
| b | Level \* cardio | --- | --- | --- | -0.10 (0.40) .81 |
| b | Level \* diabetes | --- | --- | --- | 0.04 (0.31) .91 |
| b | Slope \* age | -0.01 (0.00) .15 | -0.01 (0.00) .17 | -0.01 (0.00) .16 | -0.01 (0.00) .06 |
| b | Slope \* education | --- | 0.01 (0.01) .26 | 0.01 (0.01) .27 | 0.01 (0.01) .54 |
| b | Slope \* height | --- | --- | 0.16 (0.49) .74 | 0.15 (0.52) .78 |
| b | Slope \* smoking | --- | --- | --- | -0.09 (0.07) .21 |
| b | Slope \* cardio | --- | --- | --- | -0.04 (0.12) .77 |
| b | Slope \* diabetes | --- | --- | --- | 0.21 (0.09) .02 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 11.20 (0.63) <.01 | 10.13 (0.61) <.01 | 10.01 (0.60) <.01 | 10.13 (0.63) <.01 |
| b | Var (Slope) | 0.25 (0.06) <.01 | 0.25 (0.06) <.01 | 0.25 (0.06) <.01 | 0.23 (0.06) <.01 |
| b | Var (Residual) | 5.63 (0.20) <.01 | 5.62 (0.20) <.01 | 5.63 (0.20) <.01 | 5.59 (0.21) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 |
| b | Covar (Level, Slope) | -0.25 (0.14) .09 | -0.28 (0.14) .05 | -0.28 (0.14) .04 | -0.30 (0.14) .04 |
|  | Correlation of Levels | 0.160 | 0.106 | 0.096 | 0.106 |
|  | Correlation of Slopes | 0.318 | 0.318 | 0.318 | 0.326 |
|  | Correlation of Residuals | 0.036 | 0.036 | 0.036 | 0.044 |
|  | N | 1,029 | 1,029 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -8,796 | -8,736 | -8,702 | -7,876 |
|  | AIC | 17,634 | 17,521 | 17,462 | 15,833 |
|  | BIC | 17,738 | 17,645 | 17,606 | 16,032 |

## matrices

Gender = *female*; Process (a) = *gait*; Process (b) = *matrices*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.10 (0.02) <.01 | 0.06 (0.01) <.01 | 0.06 (0.01) <.01 | 0.06 (0.01) <.01 |
| ab | Covar (Slopes) | 0.00 (0.00) .92 | 0.00 (0.00) .85 | 0.00 (0.00) .85 | 0.00 (0.00) .97 |
| ab | Covar (Residuals) | -0.00 (0.01) .86 | -0.00 (0.01) .84 | -0.00 (0.01) .86 | 0.00 (0.01) .83 |
| er | Corr (Levels) | 0.31 (0.05) <.01 | 0.24 (0.05) <.01 | 0.23 (0.05) <.01 | 0.24 (0.06) <.01 |
| er | Corr (Slopes) | 0.03 (0.29) .92 | 0.06 (0.29) .85 | 0.06 (0.30) .85 | 0.01 (0.30) .97 |
| er | Corr (Residuals) | -0.00 (0.03) .86 | -0.01 (0.03) .84 | -0.00 (0.03) .86 | 0.01 (0.03) .83 |
| a | Level | 0.69 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .70 | 0.00 (0.01) .75 | -0.00 (0.01) .80 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.23 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .17 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .20 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .02 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .04 |
| a | Slope \* education | --- | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .04 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .60 | -0.03 (0.04) .47 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .43 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .26 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 12.32 (0.13) <.01 | 9.80 (0.23) <.01 | 9.92 (0.23) <.01 | 10.12 (0.27) <.01 |
| b | Slope | 0.02 (0.03) .47 | 0.01 (0.07) .84 | 0.02 (0.07) .82 | 0.05 (0.09) .59 |
| b | Level \* age | -0.07 (0.01) <.01 | -0.06 (0.01) <.01 | -0.05 (0.01) <.01 | -0.05 (0.01) <.01 |
| b | Level \* education | --- | 0.33 (0.02) <.01 | 0.31 (0.02) <.01 | 0.30 (0.02) <.01 |
| b | Level \* height | --- | --- | 4.97 (1.11) <.01 | 4.96 (1.20) <.01 |
| b | Level \* smoking | --- | --- | --- | 0.03 (0.15) .86 |
| b | Level \* cardio | --- | --- | --- | -0.45 (0.25) .07 |
| b | Level \* diabetes | --- | --- | --- | -0.14 (0.21) .51 |
| b | Slope \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) .01 | -0.01 (0.00) .01 |
| b | Slope \* education | --- | 0.00 (0.01) .84 | 0.00 (0.01) .90 | -0.00 (0.01) .95 |
| b | Slope \* height | --- | --- | 0.29 (0.36) .41 | 0.28 (0.39) .48 |
| b | Slope \* smoking | --- | --- | --- | -0.04 (0.05) .44 |
| b | Slope \* cardio | --- | --- | --- | -0.00 (0.09) .97 |
| b | Slope \* diabetes | --- | --- | --- | 0.00 (0.07) .97 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 4.29 (0.31) <.01 | 3.21 (0.27) <.01 | 3.07 (0.27) <.01 | 2.94 (0.26) <.01 |
| b | Var (Slope) | 0.05 (0.03) .07 | 0.05 (0.03) .08 | 0.05 (0.03) .09 | 0.06 (0.03) .04 |
| b | Var (Residual) | 3.12 (0.18) <.01 | 3.12 (0.18) <.01 | 3.12 (0.18) <.01 | 3.04 (0.18) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 |
| b | Covar (Level, Slope) | -0.08 (0.08) .34 | -0.07 (0.07) .34 | -0.07 (0.07) .33 | -0.08 (0.07) .29 |
|  | Correlation of Levels | 0.3121 | 0.2448 | 0.2270 | 0.2456 |
|  | Correlation of Slopes | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
|  | Correlation of Residuals | -0.0043 | -0.0043 | -0.0043 | 0.0085 |
|  | N | 1,027 | 1,027 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -6,781 | -6,661 | -6,636 | -5,955 |
|  | AIC | 13,604 | 13,372 | 13,330 | 11,992 |
|  | BIC | 13,707 | 13,495 | 13,473 | 12,191 |

## mmse

Gender = *female*; Process (a) = *gait*; Process (b) = *mmse*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.05 (0.01) <.01 | 0.03 (0.01) <.01 | 0.03 (0.01) <.01 | 0.03 (0.01) <.01 |
| ab | Covar (Slopes) | 0.00 (0.00) .11 | 0.00 (0.00) .14 | 0.00 (0.00) .14 | 0.00 (0.00) .37 |
| ab | Covar (Residuals) | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 |
| er | Corr (Levels) | 0.30 (0.06) <.01 | 0.23 (0.06) <.01 | 0.22 (0.06) <.01 | 0.22 (0.06) <.01 |
| er | Corr (Slopes) | 0.31 (0.20) .12 | 0.29 (0.20) .15 | 0.29 (0.20) .16 | 0.19 (0.20) .36 |
| er | Corr (Residuals) | 0.07 (0.02) .01 | 0.06 (0.02) .01 | 0.07 (0.02) .01 | 0.07 (0.03) .01 |
| a | Level | 0.68 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .65 | 0.00 (0.01) .70 | -0.00 (0.01) .82 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.23 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .18 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .22 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .04 |
| a | Slope \* education | --- | -0.00 (0.00) <.01 | -0.00 (0.00) .01 | -0.00 (0.00) .03 |
| a | Slope \* height | --- | --- | -0.01 (0.03) .65 | -0.03 (0.04) .48 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .43 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .31 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 28.80 (0.07) <.01 | 27.71 (0.14) <.01 | 27.77 (0.14) <.01 | 27.80 (0.16) <.01 |
| b | Slope | -0.03 (0.02) .10 | 0.06 (0.06) .29 | 0.06 (0.06) .31 | 0.06 (0.07) .34 |
| b | Level \* age | -0.05 (0.01) <.01 | -0.05 (0.01) <.01 | -0.05 (0.01) <.01 | -0.05 (0.01) <.01 |
| b | Level \* education | --- | 0.14 (0.01) <.01 | 0.14 (0.01) <.01 | 0.14 (0.02) <.01 |
| b | Level \* height | --- | --- | 0.94 (0.66) .16 | 0.79 (0.71) .27 |
| b | Level \* smoking | --- | --- | --- | -0.01 (0.09) .88 |
| b | Level \* cardio | --- | --- | --- | -0.11 (0.13) .42 |
| b | Level \* diabetes | --- | --- | --- | 0.01 (0.13) .95 |
| b | Slope \* age | -0.01 (0.00) .01 | -0.01 (0.00) <.01 | -0.01 (0.00) .01 | -0.00 (0.00) .04 |
| b | Slope \* education | --- | -0.01 (0.01) .06 | -0.01 (0.01) .06 | -0.01 (0.01) .04 |
| b | Slope \* height | --- | --- | 0.20 (0.27) .46 | 0.07 (0.26) .78 |
| b | Slope \* smoking | --- | --- | --- | 0.02 (0.04) .61 |
| b | Slope \* cardio | --- | --- | --- | -0.02 (0.06) .72 |
| b | Slope \* diabetes | --- | --- | --- | 0.07 (0.05) .16 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 1.12 (0.14) <.01 | 0.92 (0.12) <.01 | 0.87 (0.12) <.01 | 0.88 (0.13) <.01 |
| b | Var (Slope) | 0.05 (0.03) .09 | 0.05 (0.03) .10 | 0.05 (0.03) .11 | 0.06 (0.03) .08 |
| b | Var (Residual) | 1.53 (0.07) <.01 | 1.53 (0.07) <.01 | 1.53 (0.07) <.01 | 1.51 (0.07) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 |
| b | Covar (Level, Slope) | -0.01 (0.04) .78 | 0.00 (0.04) .90 | 0.01 (0.04) .72 | -0.01 (0.04) .82 |
|  | Correlation of Levels | 0.299 | 0.232 | 0.224 | 0.228 |
|  | Correlation of Slopes | 0.277 | 0.280 | 0.286 | 0.130 |
|  | Correlation of Residuals | 0.068 | 0.068 | 0.068 | 0.073 |
|  | N | 1,030 | 1,030 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -5,876 | -5,815 | -5,780 | -5,223 |
|  | AIC | 11,794 | 11,681 | 11,618 | 10,527 |
|  | BIC | 11,898 | 11,804 | 11,761 | 10,726 |

## nart

Gender = *female*; Process (a) = *gait*; Process (b) = *nart*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.07 (0.01) <.01 | 0.03 (0.01) .01 | 0.03 (0.01) .01 | 0.02 (0.01) .05 |
| ab | Covar (Slopes) | 0.00 (0.00) .48 | 0.00 (0.00) .47 | 0.00 (0.00) .46 | 0.00 (0.00) .65 |
| ab | Covar (Residuals) | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| er | Corr (Levels) | 0.21 (0.04) <.01 | 0.12 (0.04) <.01 | 0.10 (0.04) .01 | 0.09 (0.04) .05 |
| er | Corr (Slopes) | -0.14 (0.19) .48 | -0.14 (0.20) .48 | -0.14 (0.20) .47 | -0.10 (0.22) .65 |
| er | Corr (Residuals) | 0.08 (0.02) <.01 | 0.08 (0.02) <.01 | 0.08 (0.02) <.01 | 0.08 (0.03) <.01 |
| a | Level | 0.68 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .77 | 0.00 (0.01) .82 | -0.00 (0.01) .78 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .16 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .21 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .02 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .05 |
| a | Slope \* education | --- | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .04 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .58 | -0.03 (0.04) .42 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .41 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .26 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 7.58 (0.12) <.01 | 4.96 (0.21) <.01 | 5.07 (0.21) <.01 | 5.36 (0.24) <.01 |
| b | Slope | 0.03 (0.02) .08 | 0.04 (0.04) .35 | 0.04 (0.04) .37 | 0.02 (0.05) .70 |
| b | Level \* age | 0.04 (0.01) <.01 | 0.05 (0.01) <.01 | 0.05 (0.01) <.01 | 0.04 (0.01) <.01 |
| b | Level \* education | --- | 0.34 (0.02) <.01 | 0.33 (0.02) <.01 | 0.31 (0.02) <.01 |
| b | Level \* height | --- | --- | 3.62 (0.96) <.01 | 3.18 (1.02) <.01 |
| b | Level \* smoking | --- | --- | --- | 0.05 (0.13) .70 |
| b | Level \* cardio | --- | --- | --- | 0.26 (0.19) .19 |
| b | Level \* diabetes | --- | --- | --- | -0.50 (0.19) .01 |
| b | Slope \* age | -0.00 (0.00) .12 | -0.00 (0.00) .12 | -0.00 (0.00) .13 | -0.00 (0.00) .25 |
| b | Slope \* education | --- | -0.00 (0.00) .90 | 0.00 (0.00) .91 | 0.00 (0.00) .89 |
| b | Slope \* height | --- | --- | 0.02 (0.17) .89 | 0.08 (0.19) .65 |
| b | Slope \* smoking | --- | --- | --- | 0.04 (0.02) .10 |
| b | Slope \* cardio | --- | --- | --- | -0.04 (0.04) .29 |
| b | Slope \* diabetes | --- | --- | --- | -0.03 (0.04) .41 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 4.70 (0.27) <.01 | 3.53 (0.20) <.01 | 3.38 (0.19) <.01 | 3.22 (0.20) <.01 |
| b | Var (Slope) | 0.02 (0.01) .04 | 0.02 (0.01) .04 | 0.02 (0.01) .04 | 0.02 (0.01) .06 |
| b | Var (Residual) | 0.70 (0.04) <.01 | 0.70 (0.04) <.01 | 0.70 (0.04) <.01 | 0.67 (0.04) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .03 |
| b | Covar (Level, Slope) | -0.04 (0.04) .25 | -0.04 (0.03) .22 | -0.04 (0.03) .25 | -0.03 (0.03) .40 |
|  | Correlation of Levels | 0.210 | 0.118 | 0.103 | 0.088 |
|  | Correlation of Slopes | 0.000 | 0.000 | 0.000 | 0.000 |
|  | Correlation of Residuals | 0.083 | 0.083 | 0.083 | 0.082 |
|  | N | 1,027 | 1,027 | 1,023 | 933 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -5,161 | -5,018 | -4,983 | -4,465 |
|  | AIC | 10,364 | 10,085 | 10,024 | 9,012 |
|  | BIC | 10,468 | 10,208 | 10,167 | 9,210 |

## num\_comp

Gender = *female*; Process (a) = *gait*; Process (b) = *num\_comp*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.16 (0.05) <.01 | 0.11 (0.04) .01 | 0.09 (0.04) .03 | 0.10 (0.04) .03 |
| ab | Covar (Slopes) | 0.00 (0.00) .39 | 0.00 (0.00) .44 | 0.00 (0.00) .44 | 0.00 (0.00) .22 |
| ab | Covar (Residuals) | 0.03 (0.01) <.01 | 0.03 (0.01) <.01 | 0.03 (0.01) <.01 | 0.03 (0.01) .02 |
| er | Corr (Levels) | 0.17 (0.05) <.01 | 0.12 (0.05) .01 | 0.11 (0.05) .02 | 0.11 (0.05) .02 |
| er | Corr (Slopes) | 0.18 (0.21) .37 | 0.17 (0.21) .42 | 0.17 (0.21) .42 | 0.29 (0.23) .20 |
| er | Corr (Residuals) | 0.07 (0.02) <.01 | 0.07 (0.02) <.01 | 0.07 (0.02) <.01 | 0.06 (0.02) .02 |
| a | Level | 0.68 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .93 | 0.00 (0.01) .98 | -0.00 (0.01) .62 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .17 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .21 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .02 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .06 |
| a | Slope \* education | --- | -0.00 (0.00) .01 | -0.00 (0.00) .02 | -0.00 (0.00) .06 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .62 | -0.03 (0.04) .47 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .40 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .29 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 26.66 (0.35) <.01 | 22.30 (0.66) <.01 | 22.65 (0.66) <.01 | 23.29 (0.77) <.01 |
| b | Slope | 0.10 (0.07) .15 | 0.26 (0.14) .06 | 0.27 (0.14) .06 | 0.39 (0.17) .02 |
| b | Level \* age | -0.19 (0.03) <.01 | -0.18 (0.03) <.01 | -0.17 (0.03) <.01 | -0.17 (0.03) <.01 |
| b | Level \* education | --- | 0.57 (0.07) <.01 | 0.53 (0.07) <.01 | 0.50 (0.08) <.01 |
| b | Level \* height | --- | --- | 11.25 (3.15) <.01 | 11.38 (3.37) <.01 |
| b | Level \* smoking | --- | --- | --- | -0.37 (0.44) .40 |
| b | Level \* cardio | --- | --- | --- | -0.48 (0.70) .49 |
| b | Level \* diabetes | --- | --- | --- | -0.32 (0.60) .59 |
| b | Slope \* age | -0.03 (0.01) <.01 | -0.03 (0.01) <.01 | -0.03 (0.01) <.01 | -0.03 (0.01) <.01 |
| b | Slope \* education | --- | -0.02 (0.02) .21 | -0.02 (0.02) .17 | -0.03 (0.02) .11 |
| b | Slope \* height | --- | --- | 0.84 (0.76) .27 | 1.00 (0.81) .22 |
| b | Slope \* smoking | --- | --- | --- | -0.08 (0.11) .46 |
| b | Slope \* cardio | --- | --- | --- | -0.10 (0.17) .54 |
| b | Slope \* diabetes | --- | --- | --- | -0.06 (0.15) .71 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 37.89 (2.26) <.01 | 34.68 (2.11) <.01 | 33.26 (2.03) <.01 | 32.43 (2.12) <.01 |
| b | Var (Slope) | 0.36 (0.14) .01 | 0.36 (0.14) .01 | 0.35 (0.14) .01 | 0.37 (0.15) .02 |
| b | Var (Residual) | 15.04 (0.76) <.01 | 15.03 (0.76) <.01 | 15.04 (0.76) <.01 | 15.14 (0.82) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 |
| b | Covar (Level, Slope) | -0.35 (0.41) .39 | -0.24 (0.41) .55 | -0.22 (0.40) .58 | -0.28 (0.43) .51 |
|  | Correlation of Levels | 0.172 | 0.122 | 0.108 | 0.115 |
|  | Correlation of Slopes | 0.159 | 0.159 | 0.161 | 0.209 |
|  | Correlation of Residuals | 0.067 | 0.067 | 0.067 | 0.056 |
|  | N | 1,029 | 1,029 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -10,529 | -10,482 | -10,442 | -9,476 |
|  | AIC | 21,100 | 21,014 | 20,942 | 19,033 |
|  | BIC | 21,204 | 21,138 | 21,085 | 19,232 |

## symbol

Gender = *female*; Process (a) = *gait*; Process (b) = *symbol*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.38 (0.06) <.01 | 0.26 (0.06) <.01 | 0.24 (0.06) <.01 | 0.27 (0.06) <.01 |
| ab | Covar (Slopes) | 0.00 (0.00) .32 | 0.00 (0.00) .40 | 0.00 (0.00) .39 | 0.00 (0.00) .59 |
| ab | Covar (Residuals) | 0.05 (0.02) <.01 | 0.05 (0.02) <.01 | 0.05 (0.02) <.01 | 0.04 (0.02) .03 |
| er | Corr (Levels) | 0.28 (0.04) <.01 | 0.22 (0.04) <.01 | 0.20 (0.04) <.01 | 0.23 (0.04) <.01 |
| er | Corr (Slopes) | 0.14 (0.14) .31 | 0.12 (0.14) .39 | 0.13 (0.14) .38 | 0.09 (0.16) .59 |
| er | Corr (Residuals) | 0.07 (0.03) <.01 | 0.07 (0.03) <.01 | 0.07 (0.03) <.01 | 0.06 (0.03) .03 |
| a | Level | 0.68 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .88 | 0.00 (0.01) .93 | -0.00 (0.01) .67 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .17 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .21 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .02 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .05 |
| a | Slope \* education | --- | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .05 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .60 | -0.03 (0.04) .44 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .40 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .28 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 42.78 (0.50) <.01 | 34.23 (0.91) <.01 | 34.71 (0.92) <.01 | 35.74 (1.08) <.01 |
| b | Slope | 0.10 (0.10) .30 | 0.46 (0.21) .03 | 0.48 (0.21) .02 | 0.85 (0.24) <.01 |
| b | Level \* age | -0.40 (0.04) <.01 | -0.38 (0.04) <.01 | -0.37 (0.04) <.01 | -0.38 (0.04) <.01 |
| b | Level \* education | --- | 1.12 (0.09) <.01 | 1.06 (0.09) <.01 | 1.01 (0.10) <.01 |
| b | Level \* height | --- | --- | 14.94 (3.98) <.01 | 16.69 (4.22) <.01 |
| b | Level \* smoking | --- | --- | --- | -0.14 (0.59) .81 |
| b | Level \* cardio | --- | --- | --- | -0.67 (0.89) .45 |
| b | Level \* diabetes | --- | --- | --- | -1.22 (0.81) .13 |
| b | Slope \* age | -0.06 (0.01) <.01 | -0.06 (0.01) <.01 | -0.06 (0.01) <.01 | -0.06 (0.01) <.01 |
| b | Slope \* education | --- | -0.05 (0.02) .06 | -0.05 (0.03) .05 | -0.07 (0.03) .01 |
| b | Slope \* height | --- | --- | 1.25 (1.11) .26 | 1.05 (1.15) .36 |
| b | Slope \* smoking | --- | --- | --- | -0.25 (0.15) .09 |
| b | Slope \* cardio | --- | --- | --- | -0.07 (0.22) .76 |
| b | Slope \* diabetes | --- | --- | --- | -0.09 (0.19) .64 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 78.89 (4.79) <.01 | 66.47 (4.15) <.01 | 64.69 (4.15) <.01 | 62.51 (4.29) <.01 |
| b | Var (Slope) | 1.17 (0.32) <.01 | 1.16 (0.31) <.01 | 1.15 (0.31) <.01 | 1.17 (0.33) <.01 |
| b | Var (Residual) | 22.56 (1.21) <.01 | 22.54 (1.20) <.01 | 22.53 (1.21) <.01 | 21.97 (1.27) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 |
| b | Covar (Level, Slope) | 0.57 (0.85) .50 | 1.07 (0.79) .18 | 0.99 (0.78) .21 | 0.76 (0.82) .36 |
|  | Correlation of Levels | 0.281 | 0.216 | 0.203 | 0.236 |
|  | Correlation of Slopes | 0.117 | 0.088 | 0.088 | 0.058 |
|  | Correlation of Residuals | 0.076 | 0.076 | 0.074 | 0.062 |
|  | N | 1,028 | 1,028 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -11,511 | -11,433 | -11,399 | -10,292 |
|  | AIC | 23,063 | 22,916 | 22,857 | 20,666 |
|  | BIC | 23,167 | 23,039 | 23,000 | 20,864 |

## word\_de

Gender = *female*; Process (a) = *gait*; Process (b) = *word\_de*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.06 (0.01) <.01 | 0.05 (0.01) <.01 | 0.04 (0.01) <.01 | 0.05 (0.01) <.01 |
| ab | Covar (Slopes) | 0.00 (0.00) .01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| ab | Covar (Residuals) | -0.00 (0.00) .50 | -0.00 (0.00) .46 | -0.00 (0.00) .46 | -0.00 (0.00) .46 |
| er | Corr (Levels) | 0.24 (0.05) <.01 | 0.20 (0.05) <.01 | 0.19 (0.05) <.01 | 0.19 (0.05) <.01 |
| er | Corr (Slopes) | 0.53 (0.19) .01 | 0.57 (0.20) <.01 | 0.57 (0.20) <.01 | 0.73 (0.25) <.01 |
| er | Corr (Residuals) | -0.01 (0.02) .50 | -0.02 (0.02) .46 | -0.02 (0.02) .46 | -0.02 (0.02) .46 |
| a | Level | 0.68 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .68 | 0.00 (0.01) .73 | -0.00 (0.01) .83 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .18 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .22 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) <.01 | -0.00 (0.00) .03 |
| a | Slope \* education | --- | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .03 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .57 | -0.03 (0.04) .41 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .45 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .28 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 6.48 (0.09) <.01 | 5.34 (0.18) <.01 | 5.42 (0.17) <.01 | 5.44 (0.21) <.01 |
| b | Slope | 0.14 (0.02) <.01 | 0.12 (0.05) .02 | 0.12 (0.05) .02 | 0.15 (0.06) .01 |
| b | Level \* age | -0.07 (0.01) <.01 | -0.07 (0.01) <.01 | -0.06 (0.01) <.01 | -0.06 (0.01) <.01 |
| b | Level \* education | --- | 0.15 (0.02) <.01 | 0.14 (0.02) <.01 | 0.14 (0.02) <.01 |
| b | Level \* height | --- | --- | 2.38 (0.87) .01 | 2.04 (0.88) .02 |
| b | Level \* smoking | --- | --- | --- | -0.20 (0.13) .12 |
| b | Level \* cardio | --- | --- | --- | -0.33 (0.21) .12 |
| b | Level \* diabetes | --- | --- | --- | 0.16 (0.16) .30 |
| b | Slope \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| b | Slope \* education | --- | 0.00 (0.01) .62 | 0.00 (0.01) .70 | 0.00 (0.01) .81 |
| b | Slope \* height | --- | --- | 0.26 (0.28) .35 | 0.23 (0.29) .42 |
| b | Slope \* smoking | --- | --- | --- | -0.02 (0.04) .66 |
| b | Slope \* cardio | --- | --- | --- | 0.01 (0.06) .92 |
| b | Slope \* diabetes | --- | --- | --- | -0.05 (0.04) .20 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 2.91 (0.19) <.01 | 2.70 (0.18) <.01 | 2.64 (0.18) <.01 | 2.59 (0.18) <.01 |
| b | Var (Slope) | 0.05 (0.02) <.01 | 0.05 (0.02) <.01 | 0.04 (0.02) <.01 | 0.04 (0.02) .02 |
| b | Var (Residual) | 1.75 (0.07) <.01 | 1.75 (0.07) <.01 | 1.75 (0.07) <.01 | 1.76 (0.08) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 |
| b | Covar (Level, Slope) | -0.00 (0.04) .91 | -0.01 (0.04) .86 | -0.01 (0.04) .85 | 0.01 (0.04) .73 |
|  | Correlation of Levels | 0.243 | 0.197 | 0.187 | 0.197 |
|  | Correlation of Slopes | 0.442 | 0.442 | 0.447 | 0.474 |
|  | Correlation of Residuals | -0.017 | -0.017 | -0.017 | -0.017 |
|  | N | 1,030 | 1,030 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -6,419 | -6,375 | -6,340 | -5,748 |
|  | AIC | 12,880 | 12,800 | 12,737 | 11,578 |
|  | BIC | 12,984 | 12,924 | 12,880 | 11,777 |

## word\_im

Gender = *female*; Process (a) = *gait*; Process (b) = *word\_im*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.17 (0.02) <.01 | 0.13 (0.02) <.01 | 0.12 (0.02) <.01 | 0.13 (0.02) <.01 |
| ab | Covar (Slopes) | 0.00 (0.00) .11 | 0.00 (0.00) .10 | 0.00 (0.00) .10 | 0.00 (0.00) .05 |
| ab | Covar (Residuals) | 0.00 (0.01) .88 | 0.00 (0.01) .89 | 0.00 (0.01) .87 | -0.00 (0.01) .80 |
| er | Corr (Levels) | 0.32 (0.04) <.01 | 0.27 (0.05) <.01 | 0.26 (0.05) <.01 | 0.28 (0.05) <.01 |
| er | Corr (Slopes) | 0.24 (0.15) .10 | 0.25 (0.15) .10 | 0.25 (0.15) .10 | 0.34 (0.17) .04 |
| er | Corr (Residuals) | 0.00 (0.02) .88 | 0.00 (0.02) .89 | 0.00 (0.02) .87 | -0.01 (0.02) .80 |
| a | Level | 0.68 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .74 | 0.00 (0.01) .78 | -0.00 (0.01) .78 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.22 (0.10) .02 | 0.23 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .18 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .21 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .01 | -0.00 (0.00) <.01 | -0.00 (0.00) <.01 | -0.00 (0.00) .03 |
| a | Slope \* education | --- | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .04 |
| a | Slope \* height | --- | --- | -0.01 (0.03) .65 | -0.02 (0.04) .49 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .48 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .29 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 19.36 (0.19) <.01 | 16.51 (0.34) <.01 | 16.67 (0.33) <.01 | 16.81 (0.40) <.01 |
| b | Slope | 0.39 (0.05) <.01 | 0.43 (0.10) <.01 | 0.43 (0.10) <.01 | 0.49 (0.12) <.01 |
| b | Level \* age | -0.13 (0.02) <.01 | -0.12 (0.01) <.01 | -0.12 (0.01) <.01 | -0.11 (0.02) <.01 |
| b | Level \* education | --- | 0.38 (0.04) <.01 | 0.36 (0.04) <.01 | 0.35 (0.04) <.01 |
| b | Level \* height | --- | --- | 4.40 (1.67) .01 | 4.41 (1.81) .01 |
| b | Level \* smoking | --- | --- | --- | -0.49 (0.25) .05 |
| b | Level \* cardio | --- | --- | --- | -0.33 (0.37) .37 |
| b | Level \* diabetes | --- | --- | --- | 0.32 (0.32) .32 |
| b | Slope \* age | -0.02 (0.00) <.01 | -0.02 (0.00) <.01 | -0.02 (0.00) <.01 | -0.02 (0.00) <.01 |
| b | Slope \* education | --- | -0.01 (0.01) .64 | -0.01 (0.01) .63 | -0.01 (0.01) .60 |
| b | Slope \* height | --- | --- | 0.36 (0.54) .50 | 0.11 (0.56) .84 |
| b | Slope \* smoking | --- | --- | --- | -0.00 (0.08) .98 |
| b | Slope \* cardio | --- | --- | --- | -0.14 (0.12) .27 |
| b | Slope \* diabetes | --- | --- | --- | 0.02 (0.10) .86 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 11.50 (0.70) <.01 | 10.12 (0.66) <.01 | 9.75 (0.62) <.01 | 9.70 (0.65) <.01 |
| b | Var (Slope) | 0.29 (0.07) <.01 | 0.29 (0.07) <.01 | 0.28 (0.07) <.01 | 0.29 (0.07) <.01 |
| b | Var (Residual) | 5.83 (0.19) <.01 | 5.83 (0.19) <.01 | 5.84 (0.19) <.01 | 5.89 (0.20) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .03 | -0.00 (0.00) .03 | -0.00 (0.00) .04 |
| b | Covar (Level, Slope) | -0.01 (0.16) .96 | 0.01 (0.16) .97 | 0.04 (0.15) .82 | 0.09 (0.16) .60 |
|  | Correlation of Levels | 0.3227 | 0.2713 | 0.2591 | 0.2771 |
|  | Correlation of Slopes | 0.1762 | 0.1756 | 0.1777 | 0.2337 |
|  | Correlation of Residuals | 0.0032 | 0.0032 | 0.0032 | -0.0061 |
|  | N | 1,030 | 1,030 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -8,853 | -8,794 | -8,750 | -7,947 |
|  | AIC | 17,747 | 17,639 | 17,557 | 15,977 |
|  | BIC | 17,851 | 17,762 | 17,700 | 16,175 |

## word\_rec

Gender = *female*; Process (a) = *gait*; Process (b) = *word\_rec*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.01 (0.01) .06 | 0.01 (0.00) .10 | 0.01 (0.00) .12 | 0.01 (0.00) .08 |
| ab | Covar (Slopes) | 0.00 (0.00) .95 | 0.00 (0.00) .96 | 0.00 (0.00) .99 | 0.00 (0.00) .97 |
| ab | Covar (Residuals) | -0.00 (0.00) .68 | -0.00 (0.00) .69 | -0.00 (0.00) .70 | 0.00 (0.00) .87 |
| er | Corr (Levels) | 0.10 (0.05) .06 | 0.08 (0.05) .11 | 0.07 (0.05) .14 | 0.09 (0.05) .09 |
| er | Corr (Slopes) | 0.03 (0.52) .95 | 0.03 (0.52) .96 | 0.00 (0.58) .99 | -0.02 (0.57) .97 |
| er | Corr (Residuals) | -0.01 (0.03) .69 | -0.01 (0.03) .69 | -0.01 (0.02) .71 | -0.00 (0.03) .87 |
| a | Level | 0.69 (0.01) <.01 | 0.60 (0.02) <.01 | 0.61 (0.02) <.01 | 0.65 (0.02) <.01 |
| a | Slope | -0.01 (0.00) <.01 | 0.00 (0.01) .64 | 0.00 (0.01) .69 | -0.00 (0.01) .86 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 |
| a | Level \* height | --- | --- | 0.23 (0.10) .02 | 0.24 (0.10) .02 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.01) .17 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.02) .23 |
| a | Level \* diabetes | --- | --- | --- | -0.06 (0.02) <.01 |
| a | Slope \* age | -0.00 (0.00) .02 | -0.00 (0.00) .01 | -0.00 (0.00) .01 | -0.00 (0.00) .05 |
| a | Slope \* education | --- | -0.00 (0.00) <.01 | -0.00 (0.00) .01 | -0.00 (0.00) .03 |
| a | Slope \* height | --- | --- | -0.02 (0.03) .57 | -0.03 (0.04) .42 |
| a | Slope \* smoking | --- | --- | --- | -0.00 (0.00) .45 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.00) .27 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.00) .01 |
| b | Level | 9.83 (0.03) <.01 | 9.67 (0.07) <.01 | 9.69 (0.07) <.01 | 9.65 (0.09) <.01 |
| b | Slope | 0.01 (0.01) .03 | 0.02 (0.02) .31 | 0.02 (0.02) .34 | 0.02 (0.02) .38 |
| b | Level \* age | -0.02 (0.00) <.01 | -0.02 (0.00) <.01 | -0.01 (0.00) <.01 | -0.02 (0.00) <.01 |
| b | Level \* education | --- | 0.02 (0.01) <.01 | 0.02 (0.01) .01 | 0.02 (0.01) .01 |
| b | Level \* height | --- | --- | 0.52 (0.43) .23 | 0.45 (0.45) .32 |
| b | Level \* smoking | --- | --- | --- | -0.04 (0.05) .47 |
| b | Level \* cardio | --- | --- | --- | -0.10 (0.10) .32 |
| b | Level \* diabetes | --- | --- | --- | 0.09 (0.06) .17 |
| b | Slope \* age | -0.00 (0.00) .23 | -0.00 (0.00) .21 | -0.00 (0.00) .20 | -0.00 (0.00) .20 |
| b | Slope \* education | --- | -0.00 (0.00) .78 | -0.00 (0.00) .79 | -0.00 (0.00) .68 |
| b | Slope \* height | --- | --- | 0.05 (0.10) .58 | 0.03 (0.10) .78 |
| b | Slope \* smoking | --- | --- | --- | 0.01 (0.01) .40 |
| b | Slope \* cardio | --- | --- | --- | -0.00 (0.02) .94 |
| b | Slope \* diabetes | --- | --- | --- | -0.00 (0.02) .76 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 | 0.00 (0.00) <.01 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 0.53 (0.14) <.01 | 0.53 (0.14) <.01 | 0.46 (0.12) <.01 | 0.49 (0.13) <.01 |
| b | Var (Slope) | 0.00 (0.01) .88 | 0.00 (0.01) .88 | 0.00 (0.01) .91 | 0.00 (0.01) .89 |
| b | Var (Residual) | 0.32 (0.06) <.01 | 0.32 (0.06) <.01 | 0.31 (0.05) <.01 | 0.33 (0.06) <.01 |
| a | Covar (Level, Slope) | -0.00 (0.00) .01 | -0.00 (0.00) .02 | -0.00 (0.00) .02 | -0.00 (0.00) .03 |
| b | Covar (Level, Slope) | -0.01 (0.03) .74 | -0.01 (0.03) .74 | -0.00 (0.03) .92 | -0.00 (0.03) .96 |
|  | Correlation of Levels | 0.099 | 0.084 | 0.070 | 0.089 |
|  | Correlation of Slopes | 0.000 | 0.000 | 0.000 | 0.000 |
|  | Correlation of Residuals | -0.014 | -0.014 | -0.014 | 0.000 |
|  | N | 1,030 | 1,030 | 1,025 | 935 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -3,042 | -3,025 | -2,953 | -2,776 |
|  | AIC | 6,126 | 6,100 | 5,964 | 5,633 |
|  | BIC | 6,230 | 6,224 | 6,107 | 5,832 |

## Summary

Study = *MAP*; Gender = *female*; Process (a) = *gait*

Computed correlations:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus |
| Correlation of Levels | bnt | 0.26 | 0.22 | 0.20 | 0.18 |
| Correlation of Levels | bstory\_de | 0.06 | 0.01 | 0.01 | 0.02 |
| Correlation of Levels | bstory\_im | 0.10 | 0.06 | 0.05 | 0.08 |
| Correlation of Levels | categories | 0.24 | 0.18 | 0.17 | 0.19 |
| Correlation of Levels | digit\_b | 0.27 | 0.23 | 0.21 | 0.26 |
| Correlation of Levels | digit\_f | 0.16 | 0.12 | 0.11 | 0.10 |
| Correlation of Levels | digit\_o | 0.20 | 0.14 | 0.13 | 0.17 |
| Correlation of Levels | ideas | 0.21 | 0.17 | 0.17 | 0.15 |
| Correlation of Levels | line | 0.30 | 0.24 | 0.23 | 0.26 |
| Correlation of Levels | logic\_de | 0.16 | 0.10 | 0.09 | 0.10 |
| Correlation of Levels | logic\_im | 0.16 | 0.11 | 0.10 | 0.11 |
| Correlation of Levels | matrices | 0.31 | 0.24 | 0.23 | 0.25 |
| Correlation of Levels | mmse | 0.30 | 0.23 | 0.22 | 0.23 |
| Correlation of Levels | nart | 0.21 | 0.12 | 0.10 | 0.09 |
| Correlation of Levels | num\_comp | 0.17 | 0.12 | 0.11 | 0.12 |
| Correlation of Levels | symbol | 0.28 | 0.22 | 0.20 | 0.24 |
| Correlation of Levels | word\_de | 0.24 | 0.20 | 0.19 | 0.20 |
| Correlation of Levels | word\_im | 0.32 | 0.27 | 0.26 | 0.28 |
| Correlation of Levels | word\_rec | 0.10 | 0.08 | 0.07 | 0.09 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus |
| Correlation of Slopes | bnt | 0.19 | 0.19 | 0.20 | 0.20 |
| Correlation of Slopes | bstory\_de | 0.00 | 0.00 | 0.00 | 0.12 |
| Correlation of Slopes | bstory\_im | 0.14 | 0.14 | 0.14 | 0.16 |
| Correlation of Slopes | categories | 0.25 | 0.25 | 0.25 | 0.30 |
| Correlation of Slopes | digit\_b | 0.35 | 0.34 | 0.34 | 0.35 |
| Correlation of Slopes | digit\_f | 0.21 | 0.21 | 0.21 | 0.00 |
| Correlation of Slopes | digit\_o | 0.00 | 0.00 | 0.00 | 0.00 |
| Correlation of Slopes | ideas | 0.00 | 0.00 | 0.00 | 0.00 |
| Correlation of Slopes | line | 0.00 | 0.00 | 0.00 | 0.00 |
| Correlation of Slopes | logic\_de | 0.30 | 0.30 | 0.30 | 0.29 |
| Correlation of Slopes | logic\_im | 0.32 | 0.32 | 0.32 | 0.33 |
| Correlation of Slopes | matrices | 0.00 | 0.00 | 0.00 | 0.00 |
| Correlation of Slopes | mmse | 0.28 | 0.28 | 0.29 | 0.13 |
| Correlation of Slopes | nart | 0.00 | 0.00 | 0.00 | 0.00 |
| Correlation of Slopes | num\_comp | 0.16 | 0.16 | 0.16 | 0.21 |
| Correlation of Slopes | symbol | 0.12 | 0.09 | 0.09 | 0.06 |
| Correlation of Slopes | word\_de | 0.44 | 0.44 | 0.45 | 0.47 |
| Correlation of Slopes | word\_im | 0.18 | 0.18 | 0.18 | 0.23 |
| Correlation of Slopes | word\_rec | 0.00 | 0.00 | 0.00 | 0.00 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus |
| Correlation of Residuals | bnt | -0.02 | -0.02 | -0.01 | -0.01 |
| Correlation of Residuals | bstory\_de | 0.04 | 0.04 | 0.04 | 0.04 |
| Correlation of Residuals | bstory\_im | 0.04 | 0.04 | 0.04 | 0.04 |
| Correlation of Residuals | categories | -0.03 | -0.03 | -0.03 | -0.02 |
| Correlation of Residuals | digit\_b | 0.00 | 0.00 | 0.00 | -0.02 |
| Correlation of Residuals | digit\_f | 0.02 | 0.02 | 0.02 | 0.03 |
| Correlation of Residuals | digit\_o | 0.00 | 0.00 | 0.00 | 0.00 |
| Correlation of Residuals | ideas | 0.02 | 0.02 | 0.02 | 0.03 |
| Correlation of Residuals | line | 0.02 | 0.02 | 0.02 | 0.02 |
| Correlation of Residuals | logic\_de | -0.00 | -0.00 | -0.00 | 0.00 |
| Correlation of Residuals | logic\_im | 0.04 | 0.04 | 0.04 | 0.04 |
| Correlation of Residuals | matrices | -0.00 | -0.00 | -0.00 | 0.01 |
| Correlation of Residuals | mmse | 0.07 | 0.07 | 0.07 | 0.07 |
| Correlation of Residuals | nart | 0.08 | 0.08 | 0.08 | 0.08 |
| Correlation of Residuals | num\_comp | 0.07 | 0.07 | 0.07 | 0.06 |
| Correlation of Residuals | symbol | 0.08 | 0.08 | 0.07 | 0.06 |
| Correlation of Residuals | word\_de | -0.02 | -0.02 | -0.02 | -0.02 |
| Correlation of Residuals | word\_im | 0.00 | 0.00 | 0.00 | -0.01 |
| Correlation of Residuals | word\_rec | -0.01 | -0.01 | -0.01 | 0.00 |

P-values for corresponding covariances:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus |
| Covariance of Levels | bnt | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | bstory\_de | 0.36 | 0.83 | 0.88 | 0.80 |
| Covariance of Levels | bstory\_im | 0.14 | 0.38 | 0.42 | 0.30 |
| Covariance of Levels | categories | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | digit\_b | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | digit\_f | 0.00 | 0.02 | 0.04 | 0.06 |
| Covariance of Levels | digit\_o | 0.00 | 0.01 | 0.01 | 0.00 |
| Covariance of Levels | ideas | 0.00 | 0.00 | 0.01 | 0.01 |
| Covariance of Levels | line | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | logic\_de | 0.00 | 0.04 | 0.06 | 0.05 |
| Covariance of Levels | logic\_im | 0.00 | 0.03 | 0.05 | 0.04 |
| Covariance of Levels | matrices | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | mmse | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | nart | 0.00 | 0.01 | 0.01 | 0.05 |
| Covariance of Levels | num\_comp | 0.00 | 0.01 | 0.03 | 0.03 |
| Covariance of Levels | symbol | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | word\_de | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | word\_im | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | word\_rec | 0.06 | 0.10 | 0.12 | 0.08 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus |
| Covariance of Slopes | bnt | 0.03 | 0.04 | 0.04 | 0.10 |
| Covariance of Slopes | bstory\_de | 0.80 | 0.78 | 0.79 | 0.64 |
| Covariance of Slopes | bstory\_im | 0.44 | 0.35 | 0.36 | 0.28 |
| Covariance of Slopes | categories | 0.05 | 0.04 | 0.04 | 0.02 |
| Covariance of Slopes | digit\_b | 0.13 | 0.12 | 0.12 | 0.08 |
| Covariance of Slopes | digit\_f | 0.50 | 0.45 | 0.46 | 0.76 |
| Covariance of Slopes | digit\_o | 0.76 | 0.80 | 0.80 | 0.74 |
| Covariance of Slopes | ideas | 0.29 | 0.32 | 0.32 | 0.27 |
| Covariance of Slopes | line | 1.00 | 0.95 | 0.96 | 0.89 |
| Covariance of Slopes | logic\_de | 0.03 | 0.02 | 0.02 | 0.03 |
| Covariance of Slopes | logic\_im | 0.02 | 0.01 | 0.01 | 0.02 |
| Covariance of Slopes | matrices | 0.92 | 0.85 | 0.85 | 0.97 |
| Covariance of Slopes | mmse | 0.11 | 0.14 | 0.14 | 0.37 |
| Covariance of Slopes | nart | 0.48 | 0.47 | 0.46 | 0.65 |
| Covariance of Slopes | num\_comp | 0.39 | 0.44 | 0.44 | 0.22 |
| Covariance of Slopes | symbol | 0.32 | 0.40 | 0.39 | 0.59 |
| Covariance of Slopes | word\_de | 0.01 | 0.00 | 0.00 | 0.00 |
| Covariance of Slopes | word\_im | 0.11 | 0.10 | 0.10 | 0.05 |
| Covariance of Slopes | word\_rec | 0.95 | 0.96 | 0.99 | 0.97 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus |
| Covariance of Residuals | bnt | 0.47 | 0.45 | 0.46 | 0.69 |
| Covariance of Residuals | bstory\_de | 0.10 | 0.10 | 0.10 | 0.11 |
| Covariance of Residuals | bstory\_im | 0.14 | 0.14 | 0.14 | 0.16 |
| Covariance of Residuals | categories | 0.29 | 0.29 | 0.29 | 0.32 |
| Covariance of Residuals | digit\_b | 0.97 | 0.99 | 0.99 | 0.47 |
| Covariance of Residuals | digit\_f | 0.29 | 0.31 | 0.30 | 0.28 |
| Covariance of Residuals | digit\_o | 0.93 | 0.88 | 0.89 | 0.92 |
| Covariance of Residuals | ideas | 0.40 | 0.41 | 0.40 | 0.26 |
| Covariance of Residuals | line | 0.33 | 0.33 | 0.33 | 0.54 |
| Covariance of Residuals | logic\_de | 0.88 | 0.87 | 0.86 | 0.92 |
| Covariance of Residuals | logic\_im | 0.15 | 0.15 | 0.15 | 0.07 |
| Covariance of Residuals | matrices | 0.86 | 0.84 | 0.86 | 0.83 |
| Covariance of Residuals | mmse | 0.01 | 0.01 | 0.01 | 0.01 |
| Covariance of Residuals | nart | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Residuals | num\_comp | 0.00 | 0.00 | 0.00 | 0.02 |
| Covariance of Residuals | symbol | 0.00 | 0.00 | 0.00 | 0.03 |
| Covariance of Residuals | word\_de | 0.50 | 0.46 | 0.46 | 0.46 |
| Covariance of Residuals | word\_im | 0.88 | 0.89 | 0.87 | 0.80 |
| Covariance of Residuals | word\_rec | 0.68 | 0.69 | 0.70 | 0.87 |

# male

Gender = *male*; Model type: *aehplus*; Process (a) = *gait*; Process (b): *bnt*, *bstory\_de*, *bstory\_im*, *categories*, *digit\_b*, *digit\_f*, *digit\_o*, *ideas*, *line*, *logic\_de*, *logic\_im*, *matrices*, *mmse*, *nart*, *num\_comp*, *symbol*, *word\_de*, *word\_im*, *word\_rec*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| process | label | bnt | bstory\_de | bstory\_im | categories | digit\_b | digit\_f | digit\_o | ideas | line | logic\_de | logic\_im | matrices | mmse | nart | num\_comp | symbol | word\_de | word\_im | word\_rec | mean(sd) |
| ab | Covar (Levels) | 0.04 (0.02) .01 | 0.07 (0.02) <.01 | 0.05 (0.02) <.01 | 0.39 (0.09) <.01 | 0.06 (0.02) .01 | 0.03 (0.02) .07 | 0.02 (0.02) .21 | 0.01 (0.01) .15 | 0.04 (0.02) .10 | 0.11 (0.04) .01 | 0.08 (0.04) .04 | 0.09 (0.03) <.01 | 0.10 (0.03) <.01 | 0.05 (0.02) .03 | 0.17 (0.06) .01 | 0.53 (0.09) <.01 | 0.06 (0.02) <.01 | 0.07 (0.04) .04 | 0.01 (0.01) .49 | --- |
| ab | Covar (Slopes) | -0.00 (0.00) .31 | 0.00 (0.00) .41 | 0.00 (0.00) .23 | 0.02 (0.01) .04 | 0.00 (0.00) .68 | 0.00 (0.00) .69 | -0.00 (0.00) .74 | -0.00 (0.00) .46 | -0.00 (0.00) .22 | 0.01 (0.00) .11 | 0.00 (0.00) .36 | 0.00 (0.00) .36 | 0.00 (0.00) .49 | 0.00 (0.00) .56 | -0.00 (0.00) .28 | -0.01 (0.01) .35 | 0.00 (0.00) .13 | 0.00 (0.00) .24 | -0.00 (0.00) .65 | --- |
| ab | Covar (Residuals) | -0.00 (0.00) .48 | -0.01 (0.01) .14 | -0.01 (0.01) .06 | 0.02 (0.03) .38 | 0.00 (0.01) .96 | 0.00 (0.01) .77 | -0.00 (0.01) .92 | 0.00 (0.00) .80 | 0.02 (0.01) .06 | -0.01 (0.01) .62 | -0.01 (0.01) .68 | 0.03 (0.01) .01 | 0.01 (0.01) .50 | 0.00 (0.00) .70 | 0.04 (0.02) .06 | 0.06 (0.03) .06 | -0.00 (0.01) .65 | 0.01 (0.01) .69 | 0.00 (0.00) .36 | --- |
| er | Corr (Levels) | 0.31 (0.07) <.01 | 0.39 (0.12) <.01 | 0.36 (0.12) <.01 | 0.38 (0.08) <.01 | 0.26 (0.10) .01 | 0.17 (0.09) .07 | 0.14 (0.10) .19 | 0.18 (0.08) .03 | 0.15 (0.09) .09 | 0.24 (0.09) .01 | 0.22 (0.11) .04 | 0.36 (0.11) <.01 | 0.48 (0.10) <.01 | 0.19 (0.08) .02 | 0.22 (0.08) .01 | 0.46 (0.07) <.01 | 0.29 (0.08) <.01 | 0.22 (0.10) .03 | 0.07 (0.10) .49 | --- |
| er | Corr (Slopes) | -0.63 (0.77) .41 | 0.67 (1.71) .70 | 0.73 (0.94) .44 | 0.74 (0.36) .04 | 0.24 (0.58) .68 | 0.30 (0.78) .70 | -0.31 (1.18) .79 | -0.18 (0.23) .44 | -0.66 (0.67) .32 | 0.50 (0.35) .15 | 0.78 (1.12) .49 | 0.64 (0.64) .32 | 0.29 (0.46) .53 | 0.26 (0.48) .58 | -0.40 (0.40) .32 | -0.33 (0.40) .41 | 0.74 (0.50) .14 | 0.62 (0.54) .25 | -0.15 (0.35) .67 | --- |
| er | Corr (Residuals) | -0.03 (0.04) .48 | -0.05 (0.04) .13 | -0.07 (0.04) .06 | 0.04 (0.04) .38 | 0.00 (0.04) .96 | 0.01 (0.04) .77 | -0.00 (0.04) .92 | 0.01 (0.05) .79 | 0.08 (0.04) .06 | -0.02 (0.04) .62 | -0.02 (0.04) .68 | 0.11 (0.04) .01 | 0.03 (0.04) .50 | 0.02 (0.04) .70 | 0.07 (0.04) .06 | 0.09 (0.05) .06 | -0.02 (0.04) .65 | 0.02 (0.04) .68 | 0.04 (0.05) .37 | --- |
| a | Level | 0.65 (0.04) <.01 | 0.65 (0.04) <.01 | 0.66 (0.04) <.01 | 0.65 (0.04) <.01 | 0.65 (0.04) <.01 | 0.66 (0.04) <.01 | 0.65 (0.04) <.01 | 0.65 (0.04) <.01 | 0.65 (0.04) <.01 | 0.66 (0.04) <.01 | 0.66 (0.04) <.01 | 0.65 (0.04) <.01 | 0.66 (0.04) <.01 | 0.66 (0.04) <.01 | 0.65 (0.04) <.01 | 0.65 (0.04) <.01 | 0.65 (0.04) <.01 | 0.65 (0.04) <.01 | 0.65 (0.04) <.01 | 0.65(0.00) |
| a | Slope | -0.01 (0.01) .34 | -0.01 (0.01) .56 | -0.01 (0.01) .58 | -0.01 (0.01) .46 | -0.01 (0.01) .57 | -0.01 (0.01) .56 | -0.01 (0.01) .58 | -0.01 (0.01) .49 | -0.01 (0.01) .60 | -0.01 (0.01) .68 | -0.01 (0.01) .65 | -0.01 (0.01) .62 | -0.01 (0.01) .57 | -0.01 (0.01) .52 | -0.01 (0.01) .55 | -0.01 (0.01) .47 | -0.01 (0.01) .63 | -0.01 (0.01) .56 | -0.01 (0.01) .57 | -0.01(0.00) |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01(0.00) |
| a | Level \* education | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01 (0.00) .01 | 0.01(0.00) |
| a | Level \* height | 0.13 (0.15) .41 | 0.11 (0.15) .47 | 0.10 (0.15) .51 | 0.10 (0.15) .50 | 0.10 (0.15) .50 | 0.11 (0.15) .48 | 0.11 (0.15) .48 | 0.10 (0.15) .50 | 0.10 (0.15) .50 | 0.09 (0.15) .53 | 0.09 (0.15) .55 | 0.12 (0.15) .43 | 0.11 (0.15) .48 | 0.10 (0.15) .52 | 0.11 (0.15) .46 | 0.10 (0.15) .50 | 0.11 (0.15) .48 | 0.11 (0.15) .47 | 0.10 (0.15) .49 | 0.10(0.01) |
| a | Level \* smoking | -0.02 (0.02) .34 | -0.02 (0.02) .32 | -0.02 (0.02) .29 | -0.02 (0.02) .29 | -0.02 (0.02) .28 | -0.02 (0.02) .29 | -0.02 (0.02) .29 | -0.02 (0.02) .30 | -0.02 (0.02) .31 | -0.02 (0.02) .28 | -0.02 (0.02) .28 | -0.02 (0.02) .24 | -0.02 (0.02) .27 | -0.02 (0.02) .27 | -0.02 (0.02) .27 | -0.02 (0.02) .29 | -0.02 (0.02) .30 | -0.02 (0.02) .28 | -0.02 (0.02) .30 | -0.02(0.00) |
| a | Level \* cardio | 0.02 (0.03) .40 | 0.03 (0.03) .31 | 0.03 (0.03) .31 | 0.03 (0.03) .29 | 0.03 (0.03) .28 | 0.03 (0.03) .31 | 0.03 (0.03) .29 | 0.03 (0.03) .32 | 0.03 (0.03) .33 | 0.02 (0.03) .34 | 0.03 (0.03) .32 | 0.03 (0.03) .31 | 0.03 (0.03) .31 | 0.03 (0.03) .31 | 0.03 (0.03) .31 | 0.03 (0.03) .29 | 0.03 (0.03) .33 | 0.03 (0.03) .33 | 0.03 (0.03) .32 | 0.03(0.00) |
| a | Level \* diabetes | -0.02 (0.02) .27 | -0.03 (0.02) .23 | -0.03 (0.02) .23 | -0.02 (0.02) .32 | -0.03 (0.02) .25 | -0.02 (0.02) .26 | -0.02 (0.02) .26 | -0.02 (0.02) .25 | -0.02 (0.02) .28 | -0.02 (0.02) .25 | -0.03 (0.02) .24 | -0.02 (0.02) .28 | -0.03 (0.02) .25 | -0.02 (0.02) .26 | -0.03 (0.02) .25 | -0.02 (0.02) .26 | -0.02 (0.02) .27 | -0.02 (0.02) .26 | -0.02 (0.02) .26 | -0.02(0.00) |
| a | Slope \* age | 0.00 (0.00) .45 | -0.00 (0.00) .35 | -0.00 (0.00) .32 | -0.00 (0.00) .39 | 0.00 (0.00) .43 | 0.00 (0.00) .45 | 0.00 (0.00) .47 | -0.00 (0.00) .34 | 0.00 (0.00) .42 | -0.00 (0.00) .29 | -0.00 (0.00) .33 | 0.00 (0.00) .43 | -0.00 (0.00) .21 | -0.00 (0.00) .40 | -0.00 (0.00) .34 | -0.00 (0.00) .34 | -0.00 (0.00) .28 | -0.00 (0.00) .34 | -0.00 (0.00) .38 | -0.00(0.00) |
| a | Slope \* education | -0.00 (0.00) .54 | -0.00 (0.00) .37 | -0.00 (0.00) .36 | -0.00 (0.00) .47 | -0.00 (0.00) .33 | -0.00 (0.00) .35 | -0.00 (0.00) .33 | -0.00 (0.00) .44 | -0.00 (0.00) .32 | -0.00 (0.00) .30 | -0.00 (0.00) .32 | -0.00 (0.00) .34 | -0.00 (0.00) .38 | -0.00 (0.00) .39 | -0.00 (0.00) .38 | -0.00 (0.00) .41 | -0.00 (0.00) .36 | -0.00 (0.00) .40 | -0.00 (0.00) .35 | -0.00(0.00) |
| a | Slope \* height | 0.02 (0.05) .73 | 0.01 (0.05) .88 | 0.00 (0.05) .92 | 0.01 (0.05) .91 | 0.01 (0.05) .89 | 0.00 (0.05) .92 | 0.00 (0.05) .92 | 0.01 (0.05) .83 | 0.01 (0.05) .92 | 0.00 (0.05) .98 | 0.00 (0.05) .99 | -0.01 (0.06) .81 | 0.01 (0.05) .83 | 0.01 (0.05) .90 | -0.00 (0.05) .99 | 0.00 (0.05) .92 | 0.00 (0.05) .93 | 0.00 (0.05) .98 | 0.01 (0.05) .84 | 0.01(0.01) |
| a | Slope \* smoking | 0.00 (0.01) .78 | 0.00 (0.01) .73 | 0.00 (0.01) .74 | 0.00 (0.01) .73 | 0.00 (0.01) .72 | 0.00 (0.01) .71 | 0.00 (0.01) .70 | 0.00 (0.01) .71 | 0.00 (0.01) .74 | 0.00 (0.01) .70 | 0.00 (0.01) .70 | 0.00 (0.01) .66 | 0.00 (0.01) .79 | 0.00 (0.01) .75 | 0.00 (0.01) .77 | 0.00 (0.01) .73 | 0.00 (0.01) .77 | 0.00 (0.01) .72 | 0.00 (0.01) .70 | 0.00(0.00) |
| a | Slope \* cardio | -0.01 (0.01) .20 | -0.01 (0.01) .20 | -0.01 (0.01) .21 | -0.01 (0.01) .16 | -0.01 (0.01) .15 | -0.01 (0.01) .16 | -0.01 (0.01) .15 | -0.01 (0.01) .22 | -0.01 (0.01) .19 | -0.01 (0.01) .24 | -0.01 (0.01) .19 | -0.01 (0.01) .19 | -0.01 (0.01) .25 | -0.01 (0.01) .21 | -0.01 (0.01) .22 | -0.01 (0.01) .21 | -0.01 (0.01) .14 | -0.01 (0.01) .19 | -0.01 (0.01) .17 | -0.01(0.00) |
| a | Slope \* diabetes | 0.01 (0.01) .34 | 0.01 (0.01) .50 | 0.01 (0.01) .49 | 0.00 (0.01) .56 | 0.01 (0.01) .42 | 0.01 (0.01) .45 | 0.01 (0.01) .43 | 0.01 (0.01) .40 | 0.01 (0.01) .45 | 0.00 (0.01) .54 | 0.01 (0.01) .44 | 0.01 (0.01) .50 | 0.00 (0.01) .52 | 0.01 (0.01) .46 | 0.01 (0.01) .42 | 0.01 (0.01) .46 | 0.00 (0.01) .53 | 0.01 (0.01) .46 | 0.01 (0.01) .48 | 0.01(0.00) |
| b | Level | 13.73 (0.28) <.01 | 8.67 (0.37) <.01 | 9.16 (0.32) <.01 | 31.16 (1.49) <.01 | 4.72 (0.34) <.01 | 7.00 (0.30) <.01 | 6.88 (0.25) <.01 | 7.72 (0.09) <.01 | 10.30 (0.50) <.01 | 7.56 (0.84) <.01 | 9.23 (0.79) <.01 | 10.97 (0.46) <.01 | 27.35 (0.32) <.01 | 5.08 (0.41) <.01 | 21.17 (1.29) <.01 | 35.54 (1.92) <.01 | 4.79 (0.37) <.01 | 15.41 (0.69) <.01 | 9.38 (0.20) <.01 | --- |
| b | Slope | 0.05 (0.05) .30 | -0.04 (0.12) .73 | -0.06 (0.11) .59 | -0.04 (0.38) .92 | 0.11 (0.10) .25 | 0.14 (0.10) .14 | -0.04 (0.08) .62 | 0.00 (0.04) .99 | -0.02 (0.14) .90 | 0.18 (0.23) .44 | 0.23 (0.20) .25 | 0.07 (0.15) .62 | -0.01 (0.12) .94 | 0.12 (0.08) .15 | 0.34 (0.32) .27 | -0.13 (0.42) .76 | 0.11 (0.11) .32 | 0.20 (0.20) .33 | 0.08 (0.06) .21 | --- |
| b | Level \* age | -0.03 (0.01) .08 | -0.06 (0.01) <.01 | -0.04 (0.01) <.01 | -0.29 (0.06) <.01 | -0.03 (0.02) .04 | -0.04 (0.01) <.01 | -0.04 (0.01) <.01 | -0.01 (0.01) .28 | -0.02 (0.02) .38 | -0.12 (0.03) <.01 | -0.13 (0.03) <.01 | -0.07 (0.02) <.01 | -0.08 (0.02) <.01 | 0.01 (0.02) .55 | -0.18 (0.06) <.01 | -0.46 (0.07) <.01 | -0.10 (0.01) <.01 | -0.15 (0.03) <.01 | -0.04 (0.01) <.01 | --- |
| b | Level \* education | 0.06 (0.02) .01 | 0.12 (0.03) <.01 | 0.09 (0.03) <.01 | 0.54 (0.12) <.01 | 0.20 (0.03) <.01 | 0.20 (0.02) <.01 | 0.10 (0.02) <.01 | 0.02 (0.01) .06 | 0.21 (0.05) <.01 | 0.27 (0.07) <.01 | 0.28 (0.07) <.01 | 0.24 (0.04) <.01 | 0.14 (0.03) <.01 | 0.31 (0.04) <.01 | 0.54 (0.11) <.01 | 0.87 (0.16) <.01 | 0.14 (0.03) <.01 | 0.30 (0.06) <.01 | 0.04 (0.02) .01 | --- |
| b | Level \* height | 2.96 (1.05) <.01 | 0.70 (1.52) .64 | 1.69 (1.31) .20 | 12.33 (6.09) .04 | 0.44 (1.46) .76 | 0.36 (1.43) .80 | 2.91 (1.11) .01 | 0.84 (0.41) .04 | 5.34 (2.28) .02 | 2.25 (3.01) .46 | 3.87 (2.94) .19 | 9.18 (2.20) <.01 | 3.08 (1.31) .02 | 2.79 (1.68) .10 | 16.75 (5.10) <.01 | 22.34 (6.41) <.01 | 1.64 (1.36) .23 | 2.07 (2.30) .37 | 0.85 (0.74) .25 | --- |
| b | Level \* smoking | 0.04 (0.15) .79 | -0.01 (0.21) .98 | 0.17 (0.18) .34 | -0.86 (0.92) .34 | 0.15 (0.21) .49 | 0.43 (0.21) .04 | -0.01 (0.16) .94 | -0.07 (0.07) .35 | -0.85 (0.30) <.01 | -0.05 (0.43) .91 | 0.06 (0.41) .88 | -0.52 (0.28) .06 | -0.09 (0.24) .72 | 0.17 (0.24) .47 | -0.60 (0.77) .44 | -0.83 (1.07) .44 | -0.20 (0.22) .35 | -0.27 (0.37) .47 | -0.20 (0.14) .13 | --- |
| b | Level \* cardio | 0.11 (0.15) .47 | 0.23 (0.24) .32 | 0.20 (0.22) .34 | 0.35 (1.04) .73 | 0.25 (0.22) .27 | 0.22 (0.23) .34 | 0.21 (0.19) .28 | 0.07 (0.07) .28 | -0.00 (0.35) .99 | 0.68 (0.49) .16 | 0.61 (0.48) .20 | 0.57 (0.31) .07 | 0.27 (0.27) .31 | -0.01 (0.27) .96 | 0.57 (0.85) .50 | 0.86 (1.13) .45 | 0.23 (0.24) .34 | 0.24 (0.41) .56 | 0.10 (0.16) .54 | --- |
| b | Level \* diabetes | 0.11 (0.12) .36 | 0.04 (0.24) .87 | 0.03 (0.21) .90 | -0.19 (1.06) .86 | 0.04 (0.23) .85 | -0.14 (0.23) .54 | -0.19 (0.17) .26 | -0.02 (0.07) .81 | -0.35 (0.34) .31 | 0.66 (0.47) .16 | 0.54 (0.45) .23 | -0.04 (0.33) .91 | 0.01 (0.22) .96 | -0.08 (0.25) .76 | 1.38 (0.86) .11 | 0.07 (1.25) .96 | 0.24 (0.26) .36 | 0.38 (0.44) .39 | 0.25 (0.14) .06 | --- |
| b | Slope \* age | 0.00 (0.00) .50 | 0.00 (0.01) .37 | 0.01 (0.00) .21 | -0.04 (0.02) .02 | -0.00 (0.00) .32 | -0.00 (0.00) .78 | -0.01 (0.00) .16 | 0.00 (0.00) .11 | 0.00 (0.01) .92 | -0.01 (0.01) .09 | -0.00 (0.01) .68 | -0.01 (0.01) .25 | -0.00 (0.01) .60 | -0.00 (0.00) .22 | -0.04 (0.01) <.01 | -0.05 (0.02) <.01 | 0.00 (0.00) .94 | -0.00 (0.01) .82 | 0.00 (0.00) .94 | --- |
| b | Slope \* education | -0.00 (0.00) .44 | -0.01 (0.01) .37 | -0.01 (0.01) .28 | -0.00 (0.04) .90 | -0.00 (0.01) .56 | -0.01 (0.01) .17 | 0.01 (0.01) .39 | -0.00 (0.00) .35 | 0.00 (0.01) .99 | 0.02 (0.02) .40 | -0.00 (0.02) .95 | -0.01 (0.01) .57 | -0.01 (0.01) .50 | -0.01 (0.01) .35 | -0.05 (0.03) .06 | 0.02 (0.04) .62 | -0.00 (0.01) .69 | 0.01 (0.02) .57 | -0.00 (0.01) .44 | --- |
| b | Slope \* height | -0.33 (0.17) .06 | 0.89 (0.47) .06 | 0.13 (0.45) .77 | 1.44 (1.51) .34 | 0.71 (0.41) .08 | 0.10 (0.41) .81 | 0.06 (0.34) .85 | -0.16 (0.14) .26 | 1.00 (0.57) .08 | 0.39 (0.85) .65 | 0.10 (0.76) .90 | -0.35 (0.79) .65 | -0.07 (0.56) .90 | 0.08 (0.27) .76 | 0.24 (1.09) .83 | 2.19 (1.59) .17 | 0.16 (0.45) .73 | -0.12 (0.77) .88 | -0.34 (0.25) .17 | --- |
| b | Slope \* smoking | 0.00 (0.03) .99 | -0.07 (0.07) .34 | -0.10 (0.07) .16 | 0.16 (0.23) .49 | -0.02 (0.06) .73 | -0.08 (0.06) .16 | -0.01 (0.05) .89 | 0.04 (0.03) .15 | -0.00 (0.09) .97 | 0.07 (0.14) .62 | 0.02 (0.12) .86 | 0.13 (0.09) .13 | -0.02 (0.08) .78 | 0.02 (0.04) .61 | 0.23 (0.18) .20 | 0.04 (0.23) .85 | -0.06 (0.07) .37 | -0.05 (0.13) .68 | -0.02 (0.04) .69 | --- |
| b | Slope \* cardio | -0.02 (0.03) .61 | 0.07 (0.08) .40 | 0.05 (0.08) .55 | 0.15 (0.30) .60 | -0.02 (0.07) .75 | -0.08 (0.07) .23 | -0.02 (0.06) .68 | -0.01 (0.02) .72 | 0.12 (0.12) .31 | 0.23 (0.15) .14 | 0.04 (0.14) .77 | 0.02 (0.11) .83 | 0.10 (0.08) .22 | 0.04 (0.05) .41 | -0.13 (0.18) .47 | 0.16 (0.27) .55 | 0.07 (0.07) .28 | 0.12 (0.14) .39 | 0.07 (0.04) .11 | --- |
| b | Slope \* diabetes | 0.00 (0.03) .99 | 0.00 (0.08) .96 | 0.05 (0.08) .50 | -0.27 (0.27) .32 | -0.05 (0.06) .44 | 0.02 (0.06) .78 | -0.03 (0.05) .59 | 0.00 (0.03) .96 | 0.06 (0.10) .55 | -0.06 (0.15) .71 | -0.14 (0.14) .29 | -0.04 (0.10) .69 | 0.07 (0.08) .37 | -0.06 (0.05) .30 | -0.18 (0.18) .34 | -0.18 (0.27) .50 | -0.09 (0.07) .20 | -0.14 (0.13) .28 | -0.03 (0.04) .47 | --- |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02(0.00) |
| a | Var (Slope) | 0.00 (0.00) .13 | 0.00 (0.00) .12 | 0.00 (0.00) .09 | 0.00 (0.00) .14 | 0.00 (0.00) .15 | 0.00 (0.00) .14 | 0.00 (0.00) .13 | 0.00 (0.00) .16 | 0.00 (0.00) .15 | 0.00 (0.00) .16 | 0.00 (0.00) .16 | 0.00 (0.00) .12 | 0.00 (0.00) .17 | 0.00 (0.00) .17 | 0.00 (0.00) .17 | 0.00 (0.00) .17 | 0.00 (0.00) .11 | 0.00 (0.00) .12 | 0.00 (0.00) .17 | 0.00(0.00) |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02(0.00) |
| b | Var (Level) | 1.08 (0.55) .05 | 1.73 (0.39) <.01 | 1.12 (0.23) <.01 | 54.98 (6.33) <.01 | 2.55 (0.27) <.01 | 2.15 (0.26) <.01 | 1.21 (0.23) <.01 | 0.20 (0.15) .19 | 4.47 (0.56) <.01 | 10.75 (1.09) <.01 | 8.33 (0.98) <.01 | 3.15 (0.49) <.01 | 2.47 (1.50) .10 | 3.56 (0.40) <.01 | 35.02 (3.29) <.01 | 71.10 (7.27) <.01 | 2.50 (0.32) <.01 | 6.53 (0.89) <.01 | 0.91 (0.24) <.01 | --- |
| b | Var (Slope) | 0.01 (0.01) .57 | 0.01 (0.06) .80 | 0.02 (0.04) .56 | 0.82 (0.38) .03 | 0.02 (0.02) .27 | 0.01 (0.02) .56 | 0.01 (0.02) .79 | 0.03 (0.02) .23 | 0.05 (0.04) .22 | 0.30 (0.10) <.01 | 0.04 (0.08) .64 | 0.05 (0.05) .33 | 0.08 (0.08) .29 | 0.02 (0.02) .21 | 0.33 (0.25) .19 | 0.64 (0.41) .12 | 0.04 (0.02) .10 | 0.11 (0.07) .13 | 0.03 (0.02) .08 | --- |
| b | Var (Residual) | 0.37 (0.03) <.01 | 2.70 (0.21) <.01 | 2.20 (0.15) <.01 | 20.36 (1.30) <.01 | 1.56 (0.09) <.01 | 1.51 (0.09) <.01 | 1.18 (0.08) <.01 | 0.18 (0.05) <.01 | 3.27 (0.30) <.01 | 5.53 (0.37) <.01 | 6.49 (0.38) <.01 | 3.13 (0.33) <.01 | 1.94 (0.17) <.01 | 0.74 (0.10) <.01 | 13.73 (1.64) <.01 | 20.02 (1.61) <.01 | 1.66 (0.11) <.01 | 5.95 (0.34) <.01 | 0.45 (0.08) <.01 | --- |
| a | Covar (Level, Slope) | 0.00 (0.00) .80 | 0.00 (0.00) .89 | 0.00 (0.00) .84 | 0.00 (0.00) .95 | 0.00 (0.00) .95 | 0.00 (0.00) .92 | 0.00 (0.00) .90 | 0.00 (0.00) .93 | 0.00 (0.00) .98 | 0.00 (0.00) .94 | 0.00 (0.00) .98 | 0.00 (0.00) .79 | 0.00 (0.00) .76 | 0.00 (0.00) .95 | 0.00 (0.00) .90 | 0.00 (0.00) .81 | 0.00 (0.00) .88 | 0.00 (0.00) .88 | 0.00 (0.00) .94 | 0.00(0.00) |
| b | Covar (Level, Slope) | -0.05 (0.07) .48 | -0.03 (0.15) .85 | -0.03 (0.08) .71 | -1.11 (1.22) .36 | -0.03 (0.06) .58 | -0.02 (0.06) .68 | 0.01 (0.06) .90 | -0.06 (0.05) .22 | -0.20 (0.12) .09 | -0.30 (0.26) .24 | 0.14 (0.22) .51 | -0.08 (0.12) .53 | -0.26 (0.32) .42 | -0.15 (0.07) .04 | 0.04 (0.79) .95 | 1.54 (1.36) .26 | -0.01 (0.08) .85 | 0.19 (0.23) .41 | -0.10 (0.05) .06 | --- |
|  | Correlation of Levels | 0.307 | 0.386 | 0.356 | 0.388 | 0.27 | 0.173 | 0.1355 | 0.185 | 0.148 | 0.243 | 0.217 | 0.36 | 0.49 | 0.194 | 0.218 | 0.454 | 0.294 | 0.213 | 0.070 | 0.27(0.11) |
|  | Correlation of Slopes | -0.408 | 0.516 | 0.655 | 0.557 | 0.21 | 0.289 | -0.4082 | -0.196 | -0.442 | 0.349 | 0.632 | 0.44 | 0.22 | 0.224 | -Inf | -Inf | 0.641 | 0.481 | -0.183 | -Inf(NaN) |
|  | Correlation of Residuals | -0.034 | -0.056 | -0.071 | 0.035 | 0.00 | 0.011 | -0.0063 | 0.016 | 0.076 | -0.021 | -0.016 | 0.11 | 0.03 | 0.016 | 0.074 | 0.088 | -0.016 | 0.017 | 0.041 | 0.02(0.05) |
|  | N | 321 | 321 | 321 | 321 | 321 | 321 | 320 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 320.95(0.23) |
|  | occasions | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4.00(0.00) |
|  | parameters | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41.00(0.00) |
|  | LL | -1,165 | -2,189 | -2,044 | -3,621 | -1,987 | -1,943 | -1,729 | -598 | -2,365 | -2,794 | -2,817 | -2,102 | -2,055 | -1,655 | -3,331 | -3,603 | -2,013 | -2,749 | -1,258 | -2,211( 802) |
|  | AIC | 2,412 | 4,460 | 4,171 | 7,324 | 4,056 | 3,968 | 3,540 | 1,277 | 4,812 | 5,669 | 5,715 | 4,286 | 4,192 | 3,392 | 6,743 | 7,289 | 4,107 | 5,579 | 2,599 | 4,505(1,604) |
|  | BIC | 2,567 | 4,615 | 4,325 | 7,479 | 4,211 | 4,123 | 3,694 | 1,432 | 4,967 | 5,824 | 5,870 | 4,441 | 4,346 | 3,546 | 6,898 | 7,444 | 4,262 | 5,734 | 2,753 | 4,659(1,604) |

## bnt

Gender = *male*; Process (a) = *gait*; Process (b) = *bnt*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.06 (0.02) <.01 | 0.05 (0.02) <.01 | 0.05 (0.02) <.01 | 0.04 (0.02) .01 |
| ab | Covar (Slopes) | -0.00 (0.00) .40 | -0.00 (0.00) .38 | -0.00 (0.00) .41 | -0.00 (0.00) .31 |
| ab | Covar (Residuals) | -0.00 (0.00) .36 | -0.00 (0.00) .34 | -0.00 (0.00) .34 | -0.00 (0.00) .48 |
| er | Corr (Levels) | 0.34 (0.06) <.01 | 0.30 (0.07) <.01 | 0.30 (0.07) <.01 | 0.31 (0.07) <.01 |
| er | Corr (Slopes) | -0.54 (0.71) .45 | -0.56 (0.74) .45 | -0.54 (0.77) .48 | -0.63 (0.77) .41 |
| er | Corr (Residuals) | -0.04 (0.04) .36 | -0.04 (0.04) .34 | -0.04 (0.04) .34 | -0.03 (0.04) .48 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.65 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .01 | -0.01 (0.01) .35 | -0.01 (0.01) .35 | -0.01 (0.01) .34 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.09 (0.15) .53 | 0.13 (0.15) .41 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .34 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.03) .40 |
| a | Level \* diabetes | --- | --- | --- | -0.02 (0.02) .27 |
| a | Slope \* age | -0.00 (0.00) .31 | -0.00 (0.00) .30 | -0.00 (0.00) .31 | 0.00 (0.00) .45 |
| a | Slope \* education | --- | -0.00 (0.00) .44 | -0.00 (0.00) .40 | -0.00 (0.00) .54 |
| a | Slope \* height | --- | --- | 0.03 (0.05) .60 | 0.02 (0.05) .73 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .78 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .20 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .34 |
| b | Level | 14.33 (0.14) <.01 | 13.72 (0.24) <.01 | 13.75 (0.23) <.01 | 13.73 (0.28) <.01 |
| b | Slope | 0.02 (0.02) .31 | 0.06 (0.04) .10 | 0.06 (0.04) .12 | 0.05 (0.05) .30 |
| b | Level \* age | -0.02 (0.01) .08 | -0.03 (0.01) .06 | -0.02 (0.01) .08 | -0.03 (0.01) .08 |
| b | Level \* education | --- | 0.07 (0.02) <.01 | 0.06 (0.02) <.01 | 0.06 (0.02) .01 |
| b | Level \* height | --- | --- | 3.13 (1.05) <.01 | 2.96 (1.05) <.01 |
| b | Level \* smoking | --- | --- | --- | 0.04 (0.15) .79 |
| b | Level \* cardio | --- | --- | --- | 0.11 (0.15) .47 |
| b | Level \* diabetes | --- | --- | --- | 0.11 (0.12) .36 |
| b | Slope \* age | 0.00 (0.00) .65 | 0.00 (0.00) .60 | 0.00 (0.00) .67 | 0.00 (0.00) .50 |
| b | Slope \* education | --- | -0.00 (0.00) .18 | -0.00 (0.00) .33 | -0.00 (0.00) .44 |
| b | Slope \* height | --- | --- | -0.28 (0.17) .10 | -0.33 (0.17) .06 |
| b | Slope \* smoking | --- | --- | --- | 0.00 (0.03) .99 |
| b | Slope \* cardio | --- | --- | --- | -0.02 (0.03) .61 |
| b | Slope \* diabetes | --- | --- | --- | 0.00 (0.03) .99 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .20 | 0.00 (0.00) .19 | 0.00 (0.00) .21 | 0.00 (0.00) .13 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 1.36 (0.57) .02 | 1.29 (0.54) .02 | 1.25 (0.54) .02 | 1.08 (0.55) .05 |
| b | Var (Slope) | 0.01 (0.01) .51 | 0.01 (0.01) .53 | 0.01 (0.01) .56 | 0.01 (0.01) .57 |
| b | Var (Residual) | 0.38 (0.03) <.01 | 0.38 (0.03) <.01 | 0.38 (0.03) <.01 | 0.37 (0.03) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .90 | 0.00 (0.00) .80 | 0.00 (0.00) .78 | 0.00 (0.00) .80 |
| b | Covar (Level, Slope) | -0.06 (0.06) .34 | -0.05 (0.06) .36 | -0.05 (0.06) .40 | -0.05 (0.07) .48 |
|  | Correlation of Levels | 0.345 | 0.300 | 0.299 | 0.307 |
|  | Correlation of Slopes | -Inf | -Inf | -Inf | -0.408 |
|  | Correlation of Residuals | -0.034 | -0.045 | -0.045 | -0.034 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -1,310 | -1,298 | -1,283 | -1,165 |
|  | AIC | 2,663 | 2,647 | 2,624 | 2,412 |
|  | BIC | 2,744 | 2,743 | 2,735 | 2,567 |

## bstory\_de

Gender = *male*; Process (a) = *gait*; Process (b) = *bstory\_de*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.08 (0.02) <.01 | 0.07 (0.02) <.01 | 0.07 (0.02) <.01 | 0.07 (0.02) <.01 |
| ab | Covar (Slopes) | 0.00 (0.00) .36 | 0.00 (0.00) .38 | 0.00 (0.00) .42 | 0.00 (0.00) .41 |
| ab | Covar (Residuals) | -0.01 (0.01) .07 | -0.01 (0.01) .07 | -0.01 (0.01) .08 | -0.01 (0.01) .14 |
| er | Corr (Levels) | 0.43 (0.11) <.01 | 0.37 (0.12) <.01 | 0.38 (0.12) <.01 | 0.39 (0.12) <.01 |
| er | Corr (Slopes) | 0.69 (1.55) .66 | 0.68 (1.57) .67 | 0.66 (1.70) .70 | 0.67 (1.71) .70 |
| er | Corr (Residuals) | -0.06 (0.03) .07 | -0.06 (0.03) .06 | -0.06 (0.03) .07 | -0.05 (0.04) .13 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.65 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .02 | -0.01 (0.01) .55 | -0.01 (0.01) .52 | -0.01 (0.01) .56 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.08 (0.15) .60 | 0.11 (0.15) .47 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .32 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .31 |
| a | Level \* diabetes | --- | --- | --- | -0.03 (0.02) .23 |
| a | Slope \* age | -0.00 (0.00) .24 | -0.00 (0.00) .23 | -0.00 (0.00) .24 | -0.00 (0.00) .35 |
| a | Slope \* education | --- | -0.00 (0.00) .32 | -0.00 (0.00) .31 | -0.00 (0.00) .37 |
| a | Slope \* height | --- | --- | 0.02 (0.05) .71 | 0.01 (0.05) .88 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .73 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .20 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .50 |
| b | Level | 9.69 (0.16) <.01 | 8.67 (0.29) <.01 | 8.64 (0.29) <.01 | 8.67 (0.37) <.01 |
| b | Slope | -0.13 (0.06) .01 | -0.10 (0.08) .26 | -0.08 (0.08) .31 | -0.04 (0.12) .73 |
| b | Level \* age | -0.05 (0.01) <.01 | -0.06 (0.01) <.01 | -0.05 (0.01) <.01 | -0.06 (0.01) <.01 |
| b | Level \* education | --- | 0.12 (0.03) <.01 | 0.12 (0.03) <.01 | 0.12 (0.03) <.01 |
| b | Level \* height | --- | --- | 0.71 (1.47) .63 | 0.70 (1.52) .64 |
| b | Level \* smoking | --- | --- | --- | -0.01 (0.21) .98 |
| b | Level \* cardio | --- | --- | --- | 0.23 (0.24) .32 |
| b | Level \* diabetes | --- | --- | --- | 0.04 (0.24) .87 |
| b | Slope \* age | 0.01 (0.00) .13 | 0.01 (0.00) .15 | 0.01 (0.00) .16 | 0.00 (0.01) .37 |
| b | Slope \* education | --- | -0.00 (0.01) .64 | -0.01 (0.01) .41 | -0.01 (0.01) .37 |
| b | Slope \* height | --- | --- | 0.67 (0.45) .14 | 0.89 (0.47) .06 |
| b | Slope \* smoking | --- | --- | --- | -0.07 (0.07) .34 |
| b | Slope \* cardio | --- | --- | --- | 0.07 (0.08) .40 |
| b | Slope \* diabetes | --- | --- | --- | 0.00 (0.08) .96 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .14 | 0.00 (0.00) .14 | 0.00 (0.00) .16 | 0.00 (0.00) .12 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 1.85 (0.41) <.01 | 1.66 (0.38) <.01 | 1.68 (0.39) <.01 | 1.73 (0.39) <.01 |
| b | Var (Slope) | 0.02 (0.06) .76 | 0.02 (0.06) .77 | 0.02 (0.06) .79 | 0.01 (0.06) .80 |
| b | Var (Residual) | 2.73 (0.20) <.01 | 2.73 (0.20) <.01 | 2.73 (0.20) <.01 | 2.70 (0.21) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .76 | 0.00 (0.00) .90 | 0.00 (0.00) .93 | 0.00 (0.00) .89 |
| b | Covar (Level, Slope) | 0.00 (0.15) .97 | 0.01 (0.15) .94 | 0.00 (0.15) .99 | -0.03 (0.15) .85 |
|  | Correlation of Levels | 0.421 | 0.377 | 0.38 | 0.386 |
|  | Correlation of Slopes | 0.459 | 0.471 | 0.50 | 0.516 |
|  | Correlation of Residuals | -0.063 | -0.064 | -0.06 | -0.056 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -2,383 | -2,368 | -2,351 | -2,189 |
|  | AIC | 4,809 | 4,786 | 4,760 | 4,460 |
|  | BIC | 4,890 | 4,883 | 4,872 | 4,615 |

## bstory\_im

Gender = *male*; Process (a) = *gait*; Process (b) = *bstory\_im*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.06 (0.02) <.01 | 0.05 (0.02) .01 | 0.05 (0.02) .01 | 0.05 (0.02) <.01 |
| ab | Covar (Slopes) | 0.00 (0.00) .19 | 0.00 (0.00) .21 | 0.00 (0.00) .21 | 0.00 (0.00) .23 |
| ab | Covar (Residuals) | -0.01 (0.01) .13 | -0.01 (0.01) .13 | -0.01 (0.01) .14 | -0.01 (0.01) .06 |
| er | Corr (Levels) | 0.37 (0.11) <.01 | 0.32 (0.12) .01 | 0.32 (0.12) .01 | 0.36 (0.12) <.01 |
| er | Corr (Slopes) | 0.75 (0.83) .36 | 0.74 (0.85) .38 | 0.74 (0.86) .39 | 0.73 (0.94) .44 |
| er | Corr (Residuals) | -0.05 (0.04) .13 | -0.05 (0.04) .12 | -0.05 (0.04) .13 | -0.07 (0.04) .06 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.66 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .02 | -0.01 (0.01) .58 | -0.01 (0.01) .56 | -0.01 (0.01) .58 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.07 (0.15) .65 | 0.10 (0.15) .51 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .29 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .31 |
| a | Level \* diabetes | --- | --- | --- | -0.03 (0.02) .23 |
| a | Slope \* age | -0.00 (0.00) .23 | -0.00 (0.00) .22 | -0.00 (0.00) .22 | -0.00 (0.00) .32 |
| a | Slope \* education | --- | -0.00 (0.00) .30 | -0.00 (0.00) .30 | -0.00 (0.00) .36 |
| a | Slope \* height | --- | --- | 0.02 (0.05) .73 | 0.00 (0.05) .92 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .74 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .21 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .49 |
| b | Level | 10.05 (0.14) <.01 | 9.27 (0.25) <.01 | 9.28 (0.25) <.01 | 9.16 (0.32) <.01 |
| b | Slope | -0.17 (0.05) <.01 | -0.08 (0.08) .31 | -0.08 (0.08) .29 | -0.06 (0.11) .59 |
| b | Level \* age | -0.04 (0.01) <.01 | -0.04 (0.01) <.01 | -0.04 (0.01) <.01 | -0.04 (0.01) <.01 |
| b | Level \* education | --- | 0.09 (0.02) <.01 | 0.09 (0.02) <.01 | 0.09 (0.03) <.01 |
| b | Level \* height | --- | --- | 1.95 (1.30) .13 | 1.69 (1.31) .20 |
| b | Level \* smoking | --- | --- | --- | 0.17 (0.18) .34 |
| b | Level \* cardio | --- | --- | --- | 0.20 (0.22) .34 |
| b | Level \* diabetes | --- | --- | --- | 0.03 (0.21) .90 |
| b | Slope \* age | 0.01 (0.00) .06 | 0.01 (0.00) .06 | 0.01 (0.00) .07 | 0.01 (0.00) .21 |
| b | Slope \* education | --- | -0.01 (0.01) .20 | -0.01 (0.01) .25 | -0.01 (0.01) .28 |
| b | Slope \* height | --- | --- | -0.12 (0.43) .78 | 0.13 (0.45) .77 |
| b | Slope \* smoking | --- | --- | --- | -0.10 (0.07) .16 |
| b | Slope \* cardio | --- | --- | --- | 0.05 (0.08) .55 |
| b | Slope \* diabetes | --- | --- | --- | 0.05 (0.08) .50 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .12 | 0.00 (0.00) .13 | 0.00 (0.00) .13 | 0.00 (0.00) .09 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 1.19 (0.23) <.01 | 1.08 (0.22) <.01 | 1.06 (0.22) <.01 | 1.12 (0.23) <.01 |
| b | Var (Slope) | 0.02 (0.03) .46 | 0.02 (0.03) .48 | 0.02 (0.03) .49 | 0.02 (0.04) .56 |
| b | Var (Residual) | 2.21 (0.14) <.01 | 2.21 (0.14) <.01 | 2.21 (0.14) <.01 | 2.20 (0.15) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .74 | 0.00 (0.00) .87 | 0.00 (0.00) .88 | 0.00 (0.00) .84 |
| b | Covar (Level, Slope) | -0.03 (0.08) .70 | -0.02 (0.08) .81 | -0.02 (0.08) .81 | -0.03 (0.08) .71 |
|  | Correlation of Levels | 0.373 | 0.321 | 0.323 | 0.356 |
|  | Correlation of Slopes | 0.600 | 0.626 | 0.626 | 0.655 |
|  | Correlation of Residuals | -0.052 | -0.057 | -0.052 | -0.071 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -2,223 | -2,210 | -2,195 | -2,044 |
|  | AIC | 4,488 | 4,471 | 4,448 | 4,171 |
|  | BIC | 4,569 | 4,567 | 4,560 | 4,325 |

## categories

Gender = *male*; Process (a) = *gait*; Process (b) = *categories*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.49 (0.09) <.01 | 0.40 (0.09) <.01 | 0.39 (0.09) <.01 | 0.39 (0.09) <.01 |
| ab | Covar (Slopes) | 0.02 (0.01) .03 | 0.02 (0.01) .03 | 0.01 (0.01) .04 | 0.02 (0.01) .04 |
| ab | Covar (Residuals) | 0.01 (0.03) .57 | 0.01 (0.03) .56 | 0.02 (0.03) .54 | 0.02 (0.03) .38 |
| er | Corr (Levels) | 0.44 (0.07) <.01 | 0.40 (0.08) <.01 | 0.39 (0.08) <.01 | 0.38 (0.08) <.01 |
| er | Corr (Slopes) | 0.82 (0.42) .05 | 0.82 (0.42) .05 | 0.81 (0.43) .06 | 0.74 (0.36) .04 |
| er | Corr (Residuals) | 0.02 (0.04) .57 | 0.02 (0.04) .56 | 0.02 (0.04) .54 | 0.04 (0.04) .38 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.65 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .01 | -0.01 (0.01) .34 | -0.01 (0.01) .33 | -0.01 (0.01) .46 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.07 (0.15) .62 | 0.10 (0.15) .50 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .29 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .29 |
| a | Level \* diabetes | --- | --- | --- | -0.02 (0.02) .32 |
| a | Slope \* age | -0.00 (0.00) .33 | -0.00 (0.00) .32 | -0.00 (0.00) .32 | -0.00 (0.00) .39 |
| a | Slope \* education | --- | -0.00 (0.00) .46 | -0.00 (0.00) .45 | -0.00 (0.00) .47 |
| a | Slope \* height | --- | --- | 0.02 (0.05) .71 | 0.01 (0.05) .91 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .73 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .16 |
| a | Slope \* diabetes | --- | --- | --- | 0.00 (0.01) .56 |
| b | Level | 35.32 (0.78) <.01 | 30.12 (1.19) <.01 | 30.14 (1.18) <.01 | 31.16 (1.49) <.01 |
| b | Slope | -0.02 (0.17) .92 | -0.05 (0.32) .87 | -0.05 (0.32) .88 | -0.04 (0.38) .92 |
| b | Level \* age | -0.28 (0.06) <.01 | -0.29 (0.06) <.01 | -0.28 (0.06) <.01 | -0.29 (0.06) <.01 |
| b | Level \* education | --- | 0.62 (0.11) <.01 | 0.58 (0.12) <.01 | 0.54 (0.12) <.01 |
| b | Level \* height | --- | --- | 12.20 (5.98) .04 | 12.33 (6.09) .04 |
| b | Level \* smoking | --- | --- | --- | -0.86 (0.92) .34 |
| b | Level \* cardio | --- | --- | --- | 0.35 (1.04) .73 |
| b | Level \* diabetes | --- | --- | --- | -0.19 (1.06) .86 |
| b | Slope \* age | -0.04 (0.01) .02 | -0.04 (0.02) .02 | -0.04 (0.01) .02 | -0.04 (0.02) .02 |
| b | Slope \* education | --- | 0.01 (0.03) .86 | 0.00 (0.04) .92 | -0.00 (0.04) .90 |
| b | Slope \* height | --- | --- | 0.78 (1.48) .60 | 1.44 (1.51) .34 |
| b | Slope \* smoking | --- | --- | --- | 0.16 (0.23) .49 |
| b | Slope \* cardio | --- | --- | --- | 0.15 (0.30) .60 |
| b | Slope \* diabetes | --- | --- | --- | -0.27 (0.27) .32 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .19 | 0.00 (0.00) .20 | 0.00 (0.00) .21 | 0.00 (0.00) .14 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 60.37 (6.31) <.01 | 55.22 (6.09) <.01 | 53.59 (5.95) <.01 | 54.98 (6.33) <.01 |
| b | Var (Slope) | 0.78 (0.36) .03 | 0.80 (0.36) .03 | 0.78 (0.36) .03 | 0.82 (0.38) .03 |
| b | Var (Residual) | 20.73 (1.24) <.01 | 20.74 (1.25) <.01 | 20.66 (1.24) <.01 | 20.36 (1.30) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .88 | 0.00 (0.00) .99 | 0.00 (0.00) .98 | 0.00 (0.00) .95 |
| b | Covar (Level, Slope) | -0.48 (1.20) .69 | -0.60 (1.21) .62 | -0.57 (1.18) .63 | -1.11 (1.22) .36 |
|  | Correlation of Levels | 0.447 | 0.394 | 0.389 | 0.388 |
|  | Correlation of Slopes | Inf | Inf | Inf | 0.557 |
|  | Correlation of Residuals | 0.023 | 0.023 | 0.024 | 0.035 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -3,938 | -3,922 | -3,891 | -3,621 |
|  | AIC | 7,919 | 7,895 | 7,841 | 7,324 |
|  | BIC | 8,000 | 7,991 | 7,952 | 7,479 |

## digit\_b

Gender = *male*; Process (a) = *gait*; Process (b) = *digit\_b*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.07 (0.02) <.01 | 0.05 (0.02) .02 | 0.05 (0.02) .02 | 0.06 (0.02) .01 |
| ab | Covar (Slopes) | 0.00 (0.00) .69 | 0.00 (0.00) .68 | 0.00 (0.00) .72 | 0.00 (0.00) .68 |
| ab | Covar (Residuals) | -0.00 (0.01) .89 | -0.00 (0.01) .88 | -0.00 (0.01) .91 | 0.00 (0.01) .96 |
| er | Corr (Levels) | 0.30 (0.09) <.01 | 0.22 (0.09) .02 | 0.22 (0.09) .02 | 0.26 (0.10) .01 |
| er | Corr (Slopes) | 0.20 (0.52) .69 | 0.21 (0.51) .67 | 0.19 (0.52) .72 | 0.24 (0.58) .68 |
| er | Corr (Residuals) | -0.01 (0.04) .89 | -0.01 (0.04) .88 | -0.00 (0.04) .91 | 0.00 (0.04) .96 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.65 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .02 | -0.01 (0.01) .53 | -0.01 (0.01) .50 | -0.01 (0.01) .57 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.07 (0.15) .62 | 0.10 (0.15) .50 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .28 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .28 |
| a | Level \* diabetes | --- | --- | --- | -0.03 (0.02) .25 |
| a | Slope \* age | -0.00 (0.00) .29 | -0.00 (0.00) .29 | -0.00 (0.00) .29 | 0.00 (0.00) .43 |
| a | Slope \* education | --- | -0.00 (0.00) .32 | -0.00 (0.00) .31 | -0.00 (0.00) .33 |
| a | Slope \* height | --- | --- | 0.02 (0.05) .68 | 0.01 (0.05) .89 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .72 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .15 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .42 |
| b | Level | 6.53 (0.20) <.01 | 4.94 (0.28) <.01 | 4.93 (0.28) <.01 | 4.72 (0.34) <.01 |
| b | Slope | 0.03 (0.05) .59 | -0.00 (0.08) .99 | 0.01 (0.09) .91 | 0.11 (0.10) .25 |
| b | Level \* age | -0.03 (0.02) .04 | -0.04 (0.01) .02 | -0.04 (0.01) .02 | -0.03 (0.02) .04 |
| b | Level \* education | --- | 0.19 (0.03) <.01 | 0.19 (0.03) <.01 | 0.20 (0.03) <.01 |
| b | Level \* height | --- | --- | 0.37 (1.42) .79 | 0.44 (1.46) .76 |
| b | Level \* smoking | --- | --- | --- | 0.15 (0.21) .49 |
| b | Level \* cardio | --- | --- | --- | 0.25 (0.22) .27 |
| b | Level \* diabetes | --- | --- | --- | 0.04 (0.23) .85 |
| b | Slope \* age | -0.00 (0.00) .61 | -0.00 (0.00) .50 | -0.00 (0.00) .51 | -0.00 (0.00) .32 |
| b | Slope \* education | --- | 0.00 (0.01) .61 | 0.00 (0.01) .90 | -0.00 (0.01) .56 |
| b | Slope \* height | --- | --- | 0.68 (0.39) .08 | 0.71 (0.41) .08 |
| b | Slope \* smoking | --- | --- | --- | -0.02 (0.06) .73 |
| b | Slope \* cardio | --- | --- | --- | -0.02 (0.07) .75 |
| b | Slope \* diabetes | --- | --- | --- | -0.05 (0.06) .44 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .20 | 0.00 (0.00) .22 | 0.00 (0.00) .23 | 0.00 (0.00) .15 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 2.90 (0.28) <.01 | 2.44 (0.25) <.01 | 2.45 (0.26) <.01 | 2.55 (0.27) <.01 |
| b | Var (Slope) | 0.03 (0.02) .15 | 0.03 (0.02) .13 | 0.03 (0.02) .14 | 0.02 (0.02) .27 |
| b | Var (Residual) | 1.57 (0.09) <.01 | 1.57 (0.09) <.01 | 1.57 (0.09) <.01 | 1.56 (0.09) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .88 | 0.00 (0.00) .98 | 0.00 (0.00) .95 | 0.00 (0.00) .95 |
| b | Covar (Level, Slope) | -0.00 (0.06) .95 | -0.02 (0.06) .75 | -0.02 (0.06) .74 | -0.03 (0.06) .58 |
|  | Correlation of Levels | 0.3029 | 0.2229 | 0.2225 | 0.27 |
|  | Correlation of Slopes | Inf | Inf | Inf | 0.21 |
|  | Correlation of Residuals | -0.0055 | -0.0055 | -0.0055 | 0.00 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -2,182 | -2,152 | -2,136 | -1,987 |
|  | AIC | 4,407 | 4,355 | 4,330 | 4,056 |
|  | BIC | 4,488 | 4,451 | 4,442 | 4,211 |

## digit\_f

Gender = *male*; Process (a) = *gait*; Process (b) = *digit\_f*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.06 (0.02) .01 | 0.03 (0.02) .09 | 0.04 (0.02) .07 | 0.03 (0.02) .07 |
| ab | Covar (Slopes) | 0.00 (0.00) .57 | 0.00 (0.00) .60 | 0.00 (0.00) .62 | 0.00 (0.00) .69 |
| ab | Covar (Residuals) | 0.00 (0.01) .84 | 0.00 (0.01) .86 | 0.00 (0.01) .84 | 0.00 (0.01) .77 |
| er | Corr (Levels) | 0.25 (0.09) <.01 | 0.16 (0.09) .08 | 0.17 (0.09) .06 | 0.17 (0.09) .07 |
| er | Corr (Slopes) | 0.38 (0.70) .59 | 0.35 (0.72) .62 | 0.34 (0.72) .64 | 0.30 (0.78) .70 |
| er | Corr (Residuals) | 0.01 (0.04) .84 | 0.01 (0.04) .86 | 0.01 (0.04) .84 | 0.01 (0.04) .77 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.66 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .02 | -0.01 (0.01) .55 | -0.01 (0.01) .52 | -0.01 (0.01) .56 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.08 (0.15) .60 | 0.11 (0.15) .48 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .29 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .31 |
| a | Level \* diabetes | --- | --- | --- | -0.02 (0.02) .26 |
| a | Slope \* age | -0.00 (0.00) .30 | -0.00 (0.00) .30 | -0.00 (0.00) .30 | 0.00 (0.00) .45 |
| a | Slope \* education | --- | -0.00 (0.00) .31 | -0.00 (0.00) .30 | -0.00 (0.00) .35 |
| a | Slope \* height | --- | --- | 0.02 (0.05) .71 | 0.00 (0.05) .92 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .71 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .16 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .45 |
| b | Level | 8.93 (0.17) <.01 | 7.28 (0.25) <.01 | 7.20 (0.25) <.01 | 7.00 (0.30) <.01 |
| b | Slope | -0.04 (0.04) .29 | 0.01 (0.08) .92 | 0.02 (0.08) .79 | 0.14 (0.10) .14 |
| b | Level \* age | -0.04 (0.02) .01 | -0.04 (0.01) <.01 | -0.05 (0.01) <.01 | -0.04 (0.01) <.01 |
| b | Level \* education | --- | 0.20 (0.02) <.01 | 0.21 (0.02) <.01 | 0.20 (0.02) <.01 |
| b | Level \* height | --- | --- | 0.10 (1.41) .94 | 0.36 (1.43) .80 |
| b | Level \* smoking | --- | --- | --- | 0.43 (0.21) .04 |
| b | Level \* cardio | --- | --- | --- | 0.22 (0.23) .34 |
| b | Level \* diabetes | --- | --- | --- | -0.14 (0.23) .54 |
| b | Slope \* age | 0.00 (0.00) .59 | 0.00 (0.00) .64 | 0.00 (0.00) .62 | -0.00 (0.00) .78 |
| b | Slope \* education | --- | -0.01 (0.01) .49 | -0.01 (0.01) .37 | -0.01 (0.01) .17 |
| b | Slope \* height | --- | --- | 0.21 (0.40) .59 | 0.10 (0.41) .81 |
| b | Slope \* smoking | --- | --- | --- | -0.08 (0.06) .16 |
| b | Slope \* cardio | --- | --- | --- | -0.08 (0.07) .23 |
| b | Slope \* diabetes | --- | --- | --- | 0.02 (0.06) .78 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .18 | 0.00 (0.00) .19 | 0.00 (0.00) .20 | 0.00 (0.00) .14 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 2.80 (0.29) <.01 | 2.29 (0.26) <.01 | 2.22 (0.25) <.01 | 2.15 (0.26) <.01 |
| b | Var (Slope) | 0.02 (0.02) .45 | 0.02 (0.02) .45 | 0.02 (0.02) .46 | 0.01 (0.02) .56 |
| b | Var (Residual) | 1.57 (0.10) <.01 | 1.58 (0.10) <.01 | 1.58 (0.10) <.01 | 1.51 (0.09) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .83 | 0.00 (0.00) .98 | 0.00 (0.00) .99 | 0.00 (0.00) .92 |
| b | Covar (Level, Slope) | -0.03 (0.07) .63 | -0.02 (0.06) .74 | -0.01 (0.06) .84 | -0.02 (0.06) .68 |
|  | Correlation of Levels | 0.2536 | 0.1583 | 0.1705 | 0.173 |
|  | Correlation of Slopes | Inf | Inf | Inf | 0.289 |
|  | Correlation of Residuals | 0.0055 | 0.0055 | 0.0055 | 0.011 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -2,165 | -2,135 | -2,117 | -1,943 |
|  | AIC | 4,373 | 4,319 | 4,291 | 3,968 |
|  | BIC | 4,453 | 4,416 | 4,403 | 4,123 |

## digit\_o

Gender = *male*; Process (a) = *gait*; Process (b) = *digit\_o*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.04 (0.02) .02 | 0.02 (0.01) .17 | 0.02 (0.01) .19 | 0.02 (0.02) .21 |
| ab | Covar (Slopes) | 0.00 (0.00) .83 | 0.00 (0.00) .86 | 0.00 (0.00) .85 | -0.00 (0.00) .74 |
| ab | Covar (Residuals) | -0.00 (0.01) .85 | -0.00 (0.01) .85 | -0.00 (0.01) .84 | -0.00 (0.01) .92 |
| er | Corr (Levels) | 0.22 (0.09) .01 | 0.14 (0.10) .15 | 0.13 (0.10) .17 | 0.14 (0.10) .19 |
| er | Corr (Slopes) | -0.20 (1.03) .85 | -0.17 (1.06) .87 | -0.18 (1.08) .86 | -0.31 (1.18) .79 |
| er | Corr (Residuals) | -0.01 (0.04) .85 | -0.01 (0.04) .85 | -0.01 (0.04) .84 | -0.00 (0.04) .92 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.65 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .02 | -0.01 (0.01) .54 | -0.01 (0.01) .51 | -0.01 (0.01) .58 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.08 (0.15) .61 | 0.11 (0.15) .48 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .29 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .29 |
| a | Level \* diabetes | --- | --- | --- | -0.02 (0.02) .26 |
| a | Slope \* age | -0.00 (0.00) .31 | -0.00 (0.00) .31 | -0.00 (0.00) .32 | 0.00 (0.00) .47 |
| a | Slope \* education | --- | -0.00 (0.00) .31 | -0.00 (0.00) .30 | -0.00 (0.00) .33 |
| a | Slope \* height | --- | --- | 0.02 (0.05) .68 | 0.00 (0.05) .92 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .70 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .15 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .43 |
| b | Level | 7.75 (0.14) <.01 | 6.76 (0.22) <.01 | 6.78 (0.21) <.01 | 6.88 (0.25) <.01 |
| b | Slope | -0.04 (0.04) .36 | -0.06 (0.06) .35 | -0.05 (0.06) .42 | -0.04 (0.08) .62 |
| b | Level \* age | -0.04 (0.01) <.01 | -0.04 (0.01) <.01 | -0.04 (0.01) <.01 | -0.04 (0.01) <.01 |
| b | Level \* education | --- | 0.12 (0.02) <.01 | 0.11 (0.02) <.01 | 0.10 (0.02) <.01 |
| b | Level \* height | --- | --- | 2.60 (1.10) .02 | 2.91 (1.11) .01 |
| b | Level \* smoking | --- | --- | --- | -0.01 (0.16) .94 |
| b | Level \* cardio | --- | --- | --- | 0.21 (0.19) .28 |
| b | Level \* diabetes | --- | --- | --- | -0.19 (0.17) .26 |
| b | Slope \* age | -0.00 (0.00) .30 | -0.00 (0.00) .25 | -0.00 (0.00) .23 | -0.01 (0.00) .16 |
| b | Slope \* education | --- | 0.00 (0.01) .63 | 0.00 (0.01) .73 | 0.01 (0.01) .39 |
| b | Slope \* height | --- | --- | 0.09 (0.32) .78 | 0.06 (0.34) .85 |
| b | Slope \* smoking | --- | --- | --- | -0.01 (0.05) .89 |
| b | Slope \* cardio | --- | --- | --- | -0.02 (0.06) .68 |
| b | Slope \* diabetes | --- | --- | --- | -0.03 (0.05) .59 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .18 | 0.00 (0.00) .19 | 0.00 (0.00) .20 | 0.00 (0.00) .13 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 1.40 (0.25) <.01 | 1.22 (0.23) <.01 | 1.18 (0.23) <.01 | 1.21 (0.23) <.01 |
| b | Var (Slope) | 0.01 (0.02) .76 | 0.01 (0.02) .78 | 0.01 (0.02) .78 | 0.01 (0.02) .79 |
| b | Var (Residual) | 1.24 (0.09) <.01 | 1.25 (0.09) <.01 | 1.25 (0.09) <.01 | 1.18 (0.08) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .84 | 0.00 (0.00) .99 | 0.00 (0.00) .98 | 0.00 (0.00) .90 |
| b | Covar (Level, Slope) | 0.01 (0.06) .84 | 0.01 (0.06) .93 | 0.01 (0.06) .92 | 0.01 (0.06) .90 |
|  | Correlation of Levels | 0.2209 | 0.1381 | 0.1334 | 0.1355 |
|  | Correlation of Slopes | NaN | NaN | NaN | -0.4082 |
|  | Correlation of Residuals | -0.0062 | -0.0062 | -0.0062 | -0.0063 |
|  | N | 348 | 348 | 343 | 320 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -1,918 | -1,895 | -1,879 | -1,729 |
|  | AIC | 3,879 | 3,841 | 3,816 | 3,540 |
|  | BIC | 3,960 | 3,937 | 3,927 | 3,694 |

## ideas

Gender = *male*; Process (a) = *gait*; Process (b) = *ideas*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.01 (0.01) .09 | 0.01 (0.01) .10 | 0.01 (0.01) .11 | 0.01 (0.01) .15 |
| ab | Covar (Slopes) | 0.00 (0.00) .60 | 0.00 (0.00) .56 | 0.00 (0.00) .55 | -0.00 (0.00) .46 |
| ab | Covar (Residuals) | 0.00 (0.00) .98 | 0.00 (0.00) .97 | 0.00 (0.00) .98 | 0.00 (0.00) .80 |
| er | Corr (Levels) | 0.24 (0.09) .01 | 0.21 (0.09) .01 | 0.21 (0.09) .02 | 0.18 (0.08) .03 |
| er | Corr (Slopes) | -0.13 (0.24) .59 | -0.15 (0.24) .54 | -0.15 (0.25) .53 | -0.18 (0.23) .44 |
| er | Corr (Residuals) | -0.00 (0.05) .98 | -0.00 (0.05) .97 | -0.00 (0.05) .98 | 0.01 (0.05) .79 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.65 (0.04) <.01 |
| a | Slope | -0.01 (0.01) .02 | -0.01 (0.01) .51 | -0.01 (0.01) .48 | -0.01 (0.01) .49 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.07 (0.15) .62 | 0.10 (0.15) .50 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .30 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .32 |
| a | Level \* diabetes | --- | --- | --- | -0.02 (0.02) .25 |
| a | Slope \* age | -0.00 (0.00) .22 | -0.00 (0.00) .22 | -0.00 (0.00) .23 | -0.00 (0.00) .34 |
| a | Slope \* education | --- | -0.00 (0.00) .38 | -0.00 (0.00) .37 | -0.00 (0.00) .44 |
| a | Slope \* height | --- | --- | 0.03 (0.05) .60 | 0.01 (0.05) .83 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .71 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .22 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .40 |
| b | Level | 7.88 (0.04) <.01 | 7.74 (0.08) <.01 | 7.74 (0.08) <.01 | 7.72 (0.09) <.01 |
| b | Slope | -0.02 (0.02) .22 | -0.01 (0.03) .68 | -0.01 (0.03) .84 | 0.00 (0.04) .99 |
| b | Level \* age | -0.01 (0.01) .14 | -0.01 (0.01) .14 | -0.01 (0.01) .15 | -0.01 (0.01) .28 |
| b | Level \* education | --- | 0.02 (0.01) .08 | 0.02 (0.01) .08 | 0.02 (0.01) .06 |
| b | Level \* height | --- | --- | 0.63 (0.39) .10 | 0.84 (0.41) .04 |
| b | Level \* smoking | --- | --- | --- | -0.07 (0.07) .35 |
| b | Level \* cardio | --- | --- | --- | 0.07 (0.07) .28 |
| b | Level \* diabetes | --- | --- | --- | -0.02 (0.07) .81 |
| b | Slope \* age | 0.00 (0.00) .07 | 0.00 (0.00) .09 | 0.00 (0.00) .08 | 0.00 (0.00) .11 |
| b | Slope \* education | --- | -0.00 (0.00) .84 | -0.00 (0.00) .69 | -0.00 (0.00) .35 |
| b | Slope \* height | --- | --- | -0.09 (0.14) .54 | -0.16 (0.14) .26 |
| b | Slope \* smoking | --- | --- | --- | 0.04 (0.03) .15 |
| b | Slope \* cardio | --- | --- | --- | -0.01 (0.02) .72 |
| b | Slope \* diabetes | --- | --- | --- | 0.00 (0.03) .96 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .23 | 0.00 (0.00) .23 | 0.00 (0.00) .24 | 0.00 (0.00) .16 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 0.18 (0.14) .20 | 0.17 (0.14) .20 | 0.17 (0.14) .21 | 0.20 (0.15) .19 |
| b | Var (Slope) | 0.02 (0.02) .24 | 0.02 (0.02) .24 | 0.02 (0.02) .25 | 0.03 (0.02) .23 |
| b | Var (Residual) | 0.21 (0.05) <.01 | 0.21 (0.05) <.01 | 0.21 (0.05) <.01 | 0.18 (0.05) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .99 | 0.00 (0.00) .87 | 0.00 (0.00) .84 | 0.00 (0.00) .93 |
| b | Covar (Level, Slope) | -0.06 (0.05) .26 | -0.05 (0.05) .25 | -0.05 (0.05) .26 | -0.06 (0.05) .22 |
|  | Correlation of Levels | 0.23 | 0.21 | 0.21 | 0.185 |
|  | Correlation of Slopes | NaN | NaN | NaN | -0.196 |
|  | Correlation of Residuals | 0.00 | 0.00 | 0.00 | 0.016 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -724 | -714 | -698 | -598 |
|  | AIC | 1,490 | 1,477 | 1,454 | 1,277 |
|  | BIC | 1,571 | 1,574 | 1,565 | 1,432 |

## line

Gender = *male*; Process (a) = *gait*; Process (b) = *line*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.09 (0.03) <.01 | 0.06 (0.03) .02 | 0.06 (0.03) .03 | 0.04 (0.02) .10 |
| ab | Covar (Slopes) | -0.00 (0.00) .44 | -0.00 (0.00) .46 | -0.00 (0.00) .42 | -0.00 (0.00) .22 |
| ab | Covar (Residuals) | 0.01 (0.01) .15 | 0.01 (0.01) .16 | 0.01 (0.01) .15 | 0.02 (0.01) .06 |
| er | Corr (Levels) | 0.28 (0.08) <.01 | 0.20 (0.08) .01 | 0.19 (0.08) .02 | 0.15 (0.09) .09 |
| er | Corr (Slopes) | -0.37 (0.53) .48 | -0.36 (0.53) .50 | -0.43 (0.61) .48 | -0.66 (0.67) .32 |
| er | Corr (Residuals) | 0.06 (0.04) .15 | 0.06 (0.04) .16 | 0.06 (0.04) .15 | 0.08 (0.04) .06 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.65 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .02 | -0.01 (0.01) .56 | -0.01 (0.01) .54 | -0.01 (0.01) .60 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.06 (0.15) .66 | 0.10 (0.15) .50 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .31 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .33 |
| a | Level \* diabetes | --- | --- | --- | -0.02 (0.02) .28 |
| a | Slope \* age | -0.00 (0.00) .29 | -0.00 (0.00) .29 | -0.00 (0.00) .30 | 0.00 (0.00) .42 |
| a | Slope \* education | --- | -0.00 (0.00) .30 | -0.00 (0.00) .29 | -0.00 (0.00) .32 |
| a | Slope \* height | --- | --- | 0.02 (0.05) .68 | 0.01 (0.05) .92 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .74 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .19 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .45 |
| b | Level | 11.59 (0.26) <.01 | 9.54 (0.43) <.01 | 9.62 (0.43) <.01 | 10.30 (0.50) <.01 |
| b | Slope | 0.03 (0.07) .66 | -0.02 (0.13) .89 | 0.03 (0.12) .81 | -0.02 (0.14) .90 |
| b | Level \* age | -0.01 (0.02) .63 | -0.02 (0.02) .46 | -0.01 (0.02) .72 | -0.02 (0.02) .38 |
| b | Level \* education | --- | 0.25 (0.04) <.01 | 0.22 (0.04) <.01 | 0.21 (0.05) <.01 |
| b | Level \* height | --- | --- | 4.61 (2.22) .04 | 5.34 (2.28) .02 |
| b | Level \* smoking | --- | --- | --- | -0.85 (0.30) <.01 |
| b | Level \* cardio | --- | --- | --- | -0.00 (0.35) .99 |
| b | Level \* diabetes | --- | --- | --- | -0.35 (0.34) .31 |
| b | Slope \* age | 0.00 (0.01) .95 | 0.00 (0.01) .96 | 0.00 (0.01) .97 | 0.00 (0.01) .92 |
| b | Slope \* education | --- | 0.01 (0.01) .55 | -0.00 (0.01) .96 | 0.00 (0.01) .99 |
| b | Slope \* height | --- | --- | 0.88 (0.54) .11 | 1.00 (0.57) .08 |
| b | Slope \* smoking | --- | --- | --- | -0.00 (0.09) .97 |
| b | Slope \* cardio | --- | --- | --- | 0.12 (0.12) .31 |
| b | Slope \* diabetes | --- | --- | --- | 0.06 (0.10) .55 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .22 | 0.00 (0.00) .23 | 0.00 (0.00) .24 | 0.00 (0.00) .15 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 5.64 (0.68) <.01 | 4.85 (0.57) <.01 | 4.64 (0.55) <.01 | 4.47 (0.56) <.01 |
| b | Var (Slope) | 0.07 (0.04) .10 | 0.07 (0.04) .11 | 0.05 (0.04) .17 | 0.05 (0.04) .22 |
| b | Var (Residual) | 3.35 (0.30) <.01 | 3.35 (0.30) <.01 | 3.31 (0.30) <.01 | 3.27 (0.30) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .94 | 0.00 (0.00) .91 | 0.00 (0.00) .90 | 0.00 (0.00) .98 |
| b | Covar (Level, Slope) | -0.15 (0.13) .24 | -0.17 (0.12) .16 | -0.19 (0.12) .12 | -0.20 (0.12) .09 |
|  | Correlation of Levels | 0.277 | 0.198 | 0.189 | 0.148 |
|  | Correlation of Slopes | -Inf | -Inf | -Inf | -0.442 |
|  | Correlation of Residuals | 0.057 | 0.057 | 0.057 | 0.076 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -2,620 | -2,592 | -2,556 | -2,365 |
|  | AIC | 5,282 | 5,235 | 5,170 | 4,812 |
|  | BIC | 5,363 | 5,331 | 5,282 | 4,967 |

## logic\_de

Gender = *male*; Process (a) = *gait*; Process (b) = *logic\_de*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.13 (0.04) <.01 | 0.09 (0.04) .03 | 0.09 (0.04) .04 | 0.11 (0.04) .01 |
| ab | Covar (Slopes) | 0.01 (0.00) .09 | 0.01 (0.00) .08 | 0.01 (0.00) .09 | 0.01 (0.00) .11 |
| ab | Covar (Residuals) | 0.00 (0.01) .97 | 0.00 (0.01) .99 | 0.00 (0.01) .99 | -0.01 (0.01) .62 |
| er | Corr (Levels) | 0.26 (0.09) <.01 | 0.20 (0.09) .03 | 0.20 (0.09) .03 | 0.24 (0.09) .01 |
| er | Corr (Slopes) | 0.55 (0.37) .14 | 0.57 (0.38) .14 | 0.57 (0.39) .14 | 0.50 (0.35) .15 |
| er | Corr (Residuals) | -0.00 (0.04) .97 | 0.00 (0.04) .99 | 0.00 (0.04) .99 | -0.02 (0.04) .62 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.66 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .02 | -0.00 (0.01) .65 | -0.00 (0.01) .65 | -0.01 (0.01) .68 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.07 (0.15) .66 | 0.09 (0.15) .53 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .28 |
| a | Level \* cardio | --- | --- | --- | 0.02 (0.03) .34 |
| a | Level \* diabetes | --- | --- | --- | -0.02 (0.02) .25 |
| a | Slope \* age | -0.00 (0.00) .24 | -0.00 (0.00) .22 | -0.00 (0.00) .22 | -0.00 (0.00) .29 |
| a | Slope \* education | --- | -0.00 (0.00) .26 | -0.00 (0.00) .26 | -0.00 (0.00) .30 |
| a | Slope \* height | --- | --- | 0.01 (0.05) .81 | 0.00 (0.05) .98 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .70 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .24 |
| a | Slope \* diabetes | --- | --- | --- | 0.00 (0.01) .54 |
| b | Level | 10.03 (0.38) <.01 | 7.82 (0.67) <.01 | 7.81 (0.67) <.01 | 7.56 (0.84) <.01 |
| b | Slope | 0.38 (0.10) <.01 | 0.25 (0.18) .16 | 0.28 (0.18) .11 | 0.18 (0.23) .44 |
| b | Level \* age | -0.11 (0.03) <.01 | -0.12 (0.03) <.01 | -0.12 (0.03) <.01 | -0.12 (0.03) <.01 |
| b | Level \* education | --- | 0.26 (0.06) <.01 | 0.26 (0.06) <.01 | 0.27 (0.07) <.01 |
| b | Level \* height | --- | --- | 2.38 (3.00) .43 | 2.25 (3.01) .46 |
| b | Level \* smoking | --- | --- | --- | -0.05 (0.43) .91 |
| b | Level \* cardio | --- | --- | --- | 0.68 (0.49) .16 |
| b | Level \* diabetes | --- | --- | --- | 0.66 (0.47) .16 |
| b | Slope \* age | -0.01 (0.01) .13 | -0.01 (0.01) .10 | -0.01 (0.01) .11 | -0.01 (0.01) .09 |
| b | Slope \* education | --- | 0.02 (0.02) .31 | 0.01 (0.02) .44 | 0.02 (0.02) .40 |
| b | Slope \* height | --- | --- | 0.22 (0.87) .80 | 0.39 (0.85) .65 |
| b | Slope \* smoking | --- | --- | --- | 0.07 (0.14) .62 |
| b | Slope \* cardio | --- | --- | --- | 0.23 (0.15) .14 |
| b | Slope \* diabetes | --- | --- | --- | -0.06 (0.15) .71 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .21 | 0.00 (0.00) .22 | 0.00 (0.00) .23 | 0.00 (0.00) .16 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 11.50 (1.12) <.01 | 10.59 (1.03) <.01 | 10.49 (1.04) <.01 | 10.75 (1.09) <.01 |
| b | Var (Slope) | 0.32 (0.11) <.01 | 0.32 (0.10) <.01 | 0.30 (0.10) <.01 | 0.30 (0.10) <.01 |
| b | Var (Residual) | 5.65 (0.36) <.01 | 5.66 (0.36) <.01 | 5.65 (0.36) <.01 | 5.53 (0.37) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .94 | 0.00 (0.00) .90 | 0.00 (0.00) .88 | 0.00 (0.00) .94 |
| b | Covar (Level, Slope) | -0.20 (0.25) .43 | -0.28 (0.26) .27 | -0.24 (0.25) .33 | -0.30 (0.26) .24 |
|  | Correlation of Levels | 0.26 | 0.2 | 0.19 | 0.243 |
|  | Correlation of Slopes | Inf | Inf | Inf | 0.349 |
|  | Correlation of Residuals | 0.00 | 0.0 | 0.00 | -0.021 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -3,045 | -3,027 | -3,005 | -2,794 |
|  | AIC | 6,133 | 6,104 | 6,069 | 5,669 |
|  | BIC | 6,214 | 6,201 | 6,180 | 5,824 |

## logic\_im

Gender = *male*; Process (a) = *gait*; Process (b) = *logic\_im*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.11 (0.04) .01 | 0.07 (0.04) .08 | 0.07 (0.04) .10 | 0.08 (0.04) .04 |
| ab | Covar (Slopes) | 0.00 (0.00) .29 | 0.00 (0.00) .31 | 0.00 (0.00) .31 | 0.00 (0.00) .36 |
| ab | Covar (Residuals) | -0.00 (0.01) .97 | -0.00 (0.01) .96 | -0.00 (0.01) .97 | -0.01 (0.01) .68 |
| er | Corr (Levels) | 0.26 (0.10) .01 | 0.18 (0.11) .08 | 0.18 (0.11) .10 | 0.22 (0.11) .04 |
| er | Corr (Slopes) | 0.58 (0.61) .34 | 0.57 (0.62) .36 | 0.58 (0.64) .36 | 0.78 (1.12) .49 |
| er | Corr (Residuals) | -0.00 (0.04) .97 | -0.00 (0.04) .96 | -0.00 (0.04) .97 | -0.02 (0.04) .68 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.66 (0.04) <.01 |
| a | Slope | -0.01 (0.01) .02 | -0.00 (0.01) .66 | -0.00 (0.01) .64 | -0.01 (0.01) .65 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.06 (0.15) .68 | 0.09 (0.15) .55 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .28 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .32 |
| a | Level \* diabetes | --- | --- | --- | -0.03 (0.02) .24 |
| a | Slope \* age | -0.00 (0.00) .26 | -0.00 (0.00) .24 | -0.00 (0.00) .24 | -0.00 (0.00) .33 |
| a | Slope \* education | --- | -0.00 (0.00) .27 | -0.00 (0.00) .27 | -0.00 (0.00) .32 |
| a | Slope \* height | --- | --- | 0.01 (0.05) .80 | 0.00 (0.05) .99 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .70 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .19 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .44 |
| b | Level | 11.85 (0.36) <.01 | 9.37 (0.63) <.01 | 9.41 (0.64) <.01 | 9.23 (0.79) <.01 |
| b | Slope | 0.19 (0.08) .02 | 0.20 (0.16) .22 | 0.21 (0.16) .18 | 0.23 (0.20) .25 |
| b | Level \* age | -0.13 (0.03) <.01 | -0.13 (0.03) <.01 | -0.13 (0.03) <.01 | -0.13 (0.03) <.01 |
| b | Level \* education | --- | 0.30 (0.06) <.01 | 0.28 (0.06) <.01 | 0.28 (0.07) <.01 |
| b | Level \* height | --- | --- | 4.09 (2.95) .16 | 3.87 (2.94) .19 |
| b | Level \* smoking | --- | --- | --- | 0.06 (0.41) .88 |
| b | Level \* cardio | --- | --- | --- | 0.61 (0.48) .20 |
| b | Level \* diabetes | --- | --- | --- | 0.54 (0.45) .23 |
| b | Slope \* age | -0.00 (0.01) .94 | -0.00 (0.01) .88 | -0.00 (0.01) .88 | -0.00 (0.01) .68 |
| b | Slope \* education | --- | 0.00 (0.02) .97 | -0.00 (0.02) .94 | -0.00 (0.02) .95 |
| b | Slope \* height | --- | --- | -0.12 (0.79) .88 | 0.10 (0.76) .90 |
| b | Slope \* smoking | --- | --- | --- | 0.02 (0.12) .86 |
| b | Slope \* cardio | --- | --- | --- | 0.04 (0.14) .77 |
| b | Slope \* diabetes | --- | --- | --- | -0.14 (0.14) .29 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .21 | 0.00 (0.00) .22 | 0.00 (0.00) .23 | 0.00 (0.00) .16 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 9.52 (1.05) <.01 | 8.36 (0.94) <.01 | 8.15 (0.93) <.01 | 8.33 (0.98) <.01 |
| b | Var (Slope) | 0.11 (0.09) .22 | 0.11 (0.09) .22 | 0.10 (0.09) .25 | 0.04 (0.08) .64 |
| b | Var (Residual) | 6.51 (0.37) <.01 | 6.52 (0.37) <.01 | 6.49 (0.36) <.01 | 6.49 (0.38) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .90 | 0.00 (0.00) .94 | 0.00 (0.00) .92 | 0.00 (0.00) .98 |
| b | Covar (Level, Slope) | 0.07 (0.22) .75 | 0.07 (0.22) .76 | 0.10 (0.21) .64 | 0.14 (0.22) .51 |
|  | Correlation of Levels | 0.2612 | 0.1832 | 0.1753 | 0.217 |
|  | Correlation of Slopes | Inf | Inf | Inf | 0.632 |
|  | Correlation of Residuals | -0.0027 | -0.0027 | -0.0027 | -0.016 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -3,072 | -3,051 | -3,027 | -2,817 |
|  | AIC | 6,185 | 6,151 | 6,111 | 5,715 |
|  | BIC | 6,266 | 6,247 | 6,223 | 5,870 |

## matrices

Gender = *male*; Process (a) = *gait*; Process (b) = *matrices*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.14 (0.03) <.01 | 0.10 (0.03) <.01 | 0.09 (0.03) <.01 | 0.09 (0.03) <.01 |
| ab | Covar (Slopes) | 0.00 (0.00) .35 | 0.00 (0.00) .36 | 0.00 (0.00) .41 | 0.00 (0.00) .36 |
| ab | Covar (Residuals) | 0.03 (0.01) .01 | 0.03 (0.01) .01 | 0.03 (0.01) .01 | 0.03 (0.01) .01 |
| er | Corr (Levels) | 0.44 (0.09) <.01 | 0.37 (0.10) <.01 | 0.36 (0.11) <.01 | 0.36 (0.11) <.01 |
| er | Corr (Slopes) | 0.63 (0.64) .33 | 0.64 (0.65) .32 | 0.60 (0.68) .37 | 0.64 (0.64) .32 |
| er | Corr (Residuals) | 0.10 (0.04) .01 | 0.10 (0.04) .01 | 0.10 (0.04) .01 | 0.11 (0.04) .01 |
| a | Level | 0.71 (0.02) <.01 | 0.62 (0.03) <.01 | 0.62 (0.03) <.01 | 0.65 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .02 | -0.01 (0.01) .59 | -0.01 (0.01) .54 | -0.01 (0.01) .62 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.08 (0.15) .57 | 0.12 (0.15) .43 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .24 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .31 |
| a | Level \* diabetes | --- | --- | --- | -0.02 (0.02) .28 |
| a | Slope \* age | -0.00 (0.00) .33 | -0.00 (0.00) .35 | -0.00 (0.00) .35 | 0.00 (0.00) .43 |
| a | Slope \* education | --- | -0.00 (0.00) .28 | -0.00 (0.00) .30 | -0.00 (0.00) .34 |
| a | Slope \* height | --- | --- | 0.01 (0.05) .91 | -0.01 (0.06) .81 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .66 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .19 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .50 |
| b | Level | 13.04 (0.26) <.01 | 10.70 (0.41) <.01 | 10.86 (0.39) <.01 | 10.97 (0.46) <.01 |
| b | Slope | 0.03 (0.07) .63 | 0.11 (0.12) .37 | 0.10 (0.12) .39 | 0.07 (0.15) .62 |
| b | Level \* age | -0.07 (0.02) <.01 | -0.08 (0.02) <.01 | -0.07 (0.02) <.01 | -0.07 (0.02) <.01 |
| b | Level \* education | --- | 0.28 (0.04) <.01 | 0.24 (0.04) <.01 | 0.24 (0.04) <.01 |
| b | Level \* height | --- | --- | 8.63 (2.16) <.01 | 9.18 (2.20) <.01 |
| b | Level \* smoking | --- | --- | --- | -0.52 (0.28) .06 |
| b | Level \* cardio | --- | --- | --- | 0.57 (0.31) .07 |
| b | Level \* diabetes | --- | --- | --- | -0.04 (0.33) .91 |
| b | Slope \* age | -0.01 (0.01) .31 | -0.01 (0.01) .32 | -0.01 (0.01) .26 | -0.01 (0.01) .25 |
| b | Slope \* education | --- | -0.01 (0.01) .51 | -0.01 (0.01) .61 | -0.01 (0.01) .57 |
| b | Slope \* height | --- | --- | -0.20 (0.76) .79 | -0.35 (0.79) .65 |
| b | Slope \* smoking | --- | --- | --- | 0.13 (0.09) .13 |
| b | Slope \* cardio | --- | --- | --- | 0.02 (0.11) .83 |
| b | Slope \* diabetes | --- | --- | --- | -0.04 (0.10) .69 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .15 | 0.00 (0.00) .16 | 0.00 (0.00) .18 | 0.00 (0.00) .12 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 4.88 (0.67) <.01 | 3.84 (0.58) <.01 | 3.32 (0.49) <.01 | 3.15 (0.49) <.01 |
| b | Var (Slope) | 0.05 (0.05) .29 | 0.05 (0.05) .26 | 0.05 (0.05) .28 | 0.05 (0.05) .33 |
| b | Var (Residual) | 3.05 (0.32) <.01 | 3.06 (0.32) <.01 | 3.05 (0.32) <.01 | 3.13 (0.33) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .71 | 0.00 (0.00) .85 | 0.00 (0.00) .90 | 0.00 (0.00) .79 |
| b | Covar (Level, Slope) | -0.16 (0.15) .27 | -0.15 (0.14) .27 | -0.12 (0.12) .34 | -0.08 (0.12) .53 |
|  | Correlation of Levels | 0.44 | 0.37 | 0.36 | 0.36 |
|  | Correlation of Slopes | 0.42 | 0.41 | Inf | 0.44 |
|  | Correlation of Residuals | 0.10 | 0.10 | 0.10 | 0.11 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -2,319 | -2,286 | -2,253 | -2,102 |
|  | AIC | 4,680 | 4,623 | 4,563 | 4,286 |
|  | BIC | 4,761 | 4,719 | 4,675 | 4,441 |

## mmse

Gender = *male*; Process (a) = *gait*; Process (b) = *mmse*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.13 (0.03) <.01 | 0.11 (0.03) <.01 | 0.11 (0.03) <.01 | 0.10 (0.03) <.01 |
| ab | Covar (Slopes) | 0.00 (0.00) .54 | 0.00 (0.00) .63 | 0.00 (0.00) .68 | 0.00 (0.00) .49 |
| ab | Covar (Residuals) | 0.01 (0.01) .42 | 0.01 (0.01) .42 | 0.01 (0.01) .40 | 0.01 (0.01) .50 |
| er | Corr (Levels) | 0.52 (0.08) <.01 | 0.48 (0.09) <.01 | 0.48 (0.09) <.01 | 0.48 (0.10) <.01 |
| er | Corr (Slopes) | 0.23 (0.41) .57 | 0.18 (0.41) .65 | 0.16 (0.42) .69 | 0.29 (0.46) .53 |
| er | Corr (Residuals) | 0.03 (0.04) .42 | 0.03 (0.04) .41 | 0.03 (0.04) .40 | 0.03 (0.04) .50 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.64 (0.03) <.01 | 0.66 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .01 | -0.01 (0.01) .52 | -0.01 (0.01) .52 | -0.01 (0.01) .57 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.07 (0.15) .61 | 0.11 (0.15) .48 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .27 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .31 |
| a | Level \* diabetes | --- | --- | --- | -0.03 (0.02) .25 |
| a | Slope \* age | -0.00 (0.00) .16 | -0.00 (0.00) .14 | -0.00 (0.00) .14 | -0.00 (0.00) .21 |
| a | Slope \* education | --- | -0.00 (0.00) .33 | -0.00 (0.00) .31 | -0.00 (0.00) .38 |
| a | Slope \* height | --- | --- | 0.03 (0.05) .62 | 0.01 (0.05) .83 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .79 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .25 |
| a | Slope \* diabetes | --- | --- | --- | 0.00 (0.01) .52 |
| b | Level | 28.62 (0.17) <.01 | 27.37 (0.30) <.01 | 27.42 (0.30) <.01 | 27.35 (0.32) <.01 |
| b | Slope | -0.07 (0.05) .16 | -0.02 (0.10) .86 | -0.03 (0.10) .77 | -0.01 (0.12) .94 |
| b | Level \* age | -0.08 (0.02) <.01 | -0.09 (0.02) <.01 | -0.08 (0.02) <.01 | -0.08 (0.02) <.01 |
| b | Level \* education | --- | 0.15 (0.03) <.01 | 0.14 (0.03) <.01 | 0.14 (0.03) <.01 |
| b | Level \* height | --- | --- | 2.87 (1.29) .03 | 3.08 (1.31) .02 |
| b | Level \* smoking | --- | --- | --- | -0.09 (0.24) .72 |
| b | Level \* cardio | --- | --- | --- | 0.27 (0.27) .31 |
| b | Level \* diabetes | --- | --- | --- | 0.01 (0.22) .96 |
| b | Slope \* age | 0.00 (0.01) .96 | -0.00 (0.01) .93 | -0.00 (0.01) .83 | -0.00 (0.01) .60 |
| b | Slope \* education | --- | -0.00 (0.01) .64 | -0.00 (0.01) .72 | -0.01 (0.01) .50 |
| b | Slope \* height | --- | --- | 0.00 (0.56) .99 | -0.07 (0.56) .90 |
| b | Slope \* smoking | --- | --- | --- | -0.02 (0.08) .78 |
| b | Slope \* cardio | --- | --- | --- | 0.10 (0.08) .22 |
| b | Slope \* diabetes | --- | --- | --- | 0.07 (0.08) .37 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .23 | 0.00 (0.00) .23 | 0.00 (0.00) .24 | 0.00 (0.00) .17 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 3.04 (1.56) .05 | 2.73 (1.47) .06 | 2.71 (1.48) .07 | 2.47 (1.50) .10 |
| b | Var (Slope) | 0.12 (0.07) .11 | 0.13 (0.08) .11 | 0.12 (0.08) .13 | 0.08 (0.08) .29 |
| b | Var (Residual) | 1.89 (0.16) <.01 | 1.90 (0.16) <.01 | 1.90 (0.16) <.01 | 1.94 (0.17) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .79 | 0.00 (0.00) .66 | 0.00 (0.00) .65 | 0.00 (0.00) .76 |
| b | Covar (Level, Slope) | -0.33 (0.32) .30 | -0.35 (0.32) .29 | -0.34 (0.32) .30 | -0.26 (0.32) .42 |
|  | Correlation of Levels | 0.53 | 0.48 | 0.476 | 0.49 |
|  | Correlation of Slopes | Inf | Inf | Inf | 0.22 |
|  | Correlation of Residuals | 0.03 | 0.03 | 0.035 | 0.03 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -2,254 | -2,236 | -2,219 | -2,055 |
|  | AIC | 4,551 | 4,521 | 4,495 | 4,192 |
|  | BIC | 4,632 | 4,618 | 4,607 | 4,346 |

## nart

Gender = *male*; Process (a) = *gait*; Process (b) = *nart*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.09 (0.03) <.01 | 0.04 (0.02) .04 | 0.04 (0.02) .05 | 0.05 (0.02) .03 |
| ab | Covar (Slopes) | 0.00 (0.00) .48 | 0.00 (0.00) .53 | 0.00 (0.00) .54 | 0.00 (0.00) .56 |
| ab | Covar (Residuals) | 0.00 (0.00) .66 | 0.00 (0.00) .65 | 0.00 (0.00) .64 | 0.00 (0.00) .70 |
| er | Corr (Levels) | 0.28 (0.08) <.01 | 0.17 (0.08) .03 | 0.16 (0.08) .04 | 0.19 (0.08) .02 |
| er | Corr (Slopes) | 0.37 (0.55) .50 | 0.33 (0.54) .54 | 0.32 (0.55) .56 | 0.26 (0.48) .58 |
| er | Corr (Residuals) | 0.02 (0.04) .66 | 0.02 (0.04) .65 | 0.02 (0.04) .64 | 0.02 (0.04) .70 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.66 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .01 | -0.01 (0.01) .47 | -0.01 (0.01) .45 | -0.01 (0.01) .52 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.07 (0.15) .65 | 0.10 (0.15) .52 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .27 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .31 |
| a | Level \* diabetes | --- | --- | --- | -0.02 (0.02) .26 |
| a | Slope \* age | -0.00 (0.00) .30 | -0.00 (0.00) .29 | -0.00 (0.00) .30 | -0.00 (0.00) .40 |
| a | Slope \* education | --- | -0.00 (0.00) .36 | -0.00 (0.00) .34 | -0.00 (0.00) .39 |
| a | Slope \* height | --- | --- | 0.02 (0.05) .69 | 0.01 (0.05) .90 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .75 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .21 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .46 |
| b | Level | 7.71 (0.22) <.01 | 4.81 (0.34) <.01 | 4.83 (0.34) <.01 | 5.08 (0.41) <.01 |
| b | Slope | 0.07 (0.04) .07 | 0.14 (0.07) .05 | 0.14 (0.07) .05 | 0.12 (0.08) .15 |
| b | Level \* age | 0.02 (0.02) .42 | 0.01 (0.02) .59 | 0.01 (0.02) .46 | 0.01 (0.02) .55 |
| b | Level \* education | --- | 0.35 (0.03) <.01 | 0.34 (0.03) <.01 | 0.31 (0.04) <.01 |
| b | Level \* height | --- | --- | 2.70 (1.66) .10 | 2.79 (1.68) .10 |
| b | Level \* smoking | --- | --- | --- | 0.17 (0.24) .47 |
| b | Level \* cardio | --- | --- | --- | -0.01 (0.27) .96 |
| b | Level \* diabetes | --- | --- | --- | -0.08 (0.25) .76 |
| b | Slope \* age | -0.00 (0.00) .25 | -0.00 (0.00) .24 | -0.00 (0.00) .22 | -0.00 (0.00) .22 |
| b | Slope \* education | --- | -0.01 (0.01) .20 | -0.01 (0.01) .19 | -0.01 (0.01) .35 |
| b | Slope \* height | --- | --- | 0.07 (0.26) .77 | 0.08 (0.27) .76 |
| b | Slope \* smoking | --- | --- | --- | 0.02 (0.04) .61 |
| b | Slope \* cardio | --- | --- | --- | 0.04 (0.05) .41 |
| b | Slope \* diabetes | --- | --- | --- | -0.06 (0.05) .30 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .24 | 0.00 (0.00) .25 | 0.00 (0.00) .26 | 0.00 (0.00) .17 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 5.34 (0.54) <.01 | 3.78 (0.37) <.01 | 3.70 (0.38) <.01 | 3.56 (0.40) <.01 |
| b | Var (Slope) | 0.02 (0.01) .25 | 0.02 (0.01) .24 | 0.02 (0.01) .25 | 0.02 (0.02) .21 |
| b | Var (Residual) | 0.73 (0.09) <.01 | 0.73 (0.09) <.01 | 0.73 (0.09) <.01 | 0.74 (0.10) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .99 | 0.00 (0.00) .86 | 0.00 (0.00) .85 | 0.00 (0.00) .95 |
| b | Covar (Level, Slope) | -0.16 (0.08) .04 | -0.13 (0.06) .05 | -0.12 (0.06) .05 | -0.15 (0.07) .04 |
|  | Correlation of Levels | 0.275 | 0.168 | 0.158 | 0.194 |
|  | Correlation of Slopes | Inf | Inf | Inf | 0.224 |
|  | Correlation of Residuals | 0.016 | 0.016 | 0.016 | 0.016 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -1,857 | -1,797 | -1,780 | -1,655 |
|  | AIC | 3,755 | 3,644 | 3,618 | 3,392 |
|  | BIC | 3,836 | 3,740 | 3,730 | 3,546 |

## num\_comp

Gender = *male*; Process (a) = *gait*; Process (b) = *num\_comp*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.28 (0.07) <.01 | 0.19 (0.06) <.01 | 0.18 (0.06) <.01 | 0.17 (0.06) .01 |
| ab | Covar (Slopes) | -0.00 (0.00) .41 | -0.00 (0.00) .33 | -0.00 (0.00) .33 | -0.00 (0.00) .28 |
| ab | Covar (Residuals) | 0.04 (0.02) .05 | 0.04 (0.02) .05 | 0.04 (0.02) .05 | 0.04 (0.02) .06 |
| er | Corr (Levels) | 0.30 (0.07) <.01 | 0.23 (0.07) <.01 | 0.22 (0.08) <.01 | 0.22 (0.08) .01 |
| er | Corr (Slopes) | -0.30 (0.39) .44 | -0.38 (0.43) .38 | -0.39 (0.44) .38 | -0.40 (0.40) .32 |
| er | Corr (Residuals) | 0.08 (0.04) .05 | 0.08 (0.04) .05 | 0.08 (0.04) .05 | 0.07 (0.04) .06 |
| a | Level | 0.72 (0.02) <.01 | 0.62 (0.03) <.01 | 0.63 (0.03) <.01 | 0.65 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .01 | -0.01 (0.01) .48 | -0.01 (0.01) .50 | -0.01 (0.01) .55 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.08 (0.15) .59 | 0.11 (0.15) .46 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .27 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .31 |
| a | Level \* diabetes | --- | --- | --- | -0.03 (0.02) .25 |
| a | Slope \* age | -0.00 (0.00) .26 | -0.00 (0.00) .25 | -0.00 (0.00) .25 | -0.00 (0.00) .34 |
| a | Slope \* education | --- | -0.00 (0.00) .35 | -0.00 (0.00) .34 | -0.00 (0.00) .38 |
| a | Slope \* height | --- | --- | 0.01 (0.05) .86 | -0.00 (0.05) .99 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .77 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .22 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .42 |
| b | Level | 26.06 (0.65) <.01 | 20.84 (1.03) <.01 | 21.19 (1.01) <.01 | 21.17 (1.29) <.01 |
| b | Slope | -0.05 (0.13) .70 | 0.27 (0.25) .28 | 0.31 (0.25) .20 | 0.34 (0.32) .27 |
| b | Level \* age | -0.18 (0.06) <.01 | -0.19 (0.05) <.01 | -0.17 (0.05) <.01 | -0.18 (0.06) <.01 |
| b | Level \* education | --- | 0.63 (0.10) <.01 | 0.53 (0.10) <.01 | 0.54 (0.11) <.01 |
| b | Level \* height | --- | --- | 17.34 (5.06) <.01 | 16.75 (5.10) <.01 |
| b | Level \* smoking | --- | --- | --- | -0.60 (0.77) .44 |
| b | Level \* cardio | --- | --- | --- | 0.57 (0.85) .50 |
| b | Level \* diabetes | --- | --- | --- | 1.38 (0.86) .11 |
| b | Slope \* age | -0.04 (0.01) <.01 | -0.04 (0.01) <.01 | -0.03 (0.01) <.01 | -0.04 (0.01) <.01 |
| b | Slope \* education | --- | -0.04 (0.03) .14 | -0.04 (0.03) .11 | -0.05 (0.03) .06 |
| b | Slope \* height | --- | --- | -0.17 (1.07) .87 | 0.24 (1.09) .83 |
| b | Slope \* smoking | --- | --- | --- | 0.23 (0.18) .20 |
| b | Slope \* cardio | --- | --- | --- | -0.13 (0.18) .47 |
| b | Slope \* diabetes | --- | --- | --- | -0.18 (0.18) .34 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .24 | 0.00 (0.00) .25 | 0.00 (0.00) .25 | 0.00 (0.00) .17 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 42.11 (3.76) <.01 | 37.06 (3.39) <.01 | 35.44 (3.20) <.01 | 35.02 (3.29) <.01 |
| b | Var (Slope) | 0.39 (0.26) .13 | 0.37 (0.25) .13 | 0.36 (0.24) .14 | 0.33 (0.25) .19 |
| b | Var (Residual) | 13.84 (1.55) <.01 | 13.84 (1.55) <.01 | 13.70 (1.54) <.01 | 13.73 (1.64) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .94 | 0.00 (0.00) .79 | 0.00 (0.00) .81 | 0.00 (0.00) .90 |
| b | Covar (Level, Slope) | -0.18 (0.91) .85 | 0.14 (0.81) .86 | 0.05 (0.81) .95 | 0.04 (0.79) .95 |
|  | Correlation of Levels | 0.31 | 0.23 | 0.221 | 0.218 |
|  | Correlation of Slopes | -Inf | -Inf | -Inf | -Inf |
|  | Correlation of Residuals | 0.08 | 0.08 | 0.078 | 0.074 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -3,638 | -3,616 | -3,581 | -3,331 |
|  | AIC | 7,318 | 7,283 | 7,220 | 6,743 |
|  | BIC | 7,399 | 7,379 | 7,331 | 6,898 |

## symbol

Gender = *male*; Process (a) = *gait*; Process (b) = *symbol*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.69 (0.11) <.01 | 0.56 (0.10) <.01 | 0.53 (0.09) <.01 | 0.53 (0.09) <.01 |
| ab | Covar (Slopes) | -0.00 (0.01) .38 | -0.00 (0.01) .42 | -0.00 (0.01) .41 | -0.01 (0.01) .35 |
| ab | Covar (Residuals) | 0.05 (0.03) .09 | 0.05 (0.03) .09 | 0.05 (0.03) .08 | 0.06 (0.03) .06 |
| er | Corr (Levels) | 0.51 (0.06) <.01 | 0.46 (0.07) <.01 | 0.45 (0.07) <.01 | 0.46 (0.07) <.01 |
| er | Corr (Slopes) | -0.30 (0.37) .42 | -0.27 (0.37) .46 | -0.29 (0.38) .45 | -0.33 (0.40) .41 |
| er | Corr (Residuals) | 0.08 (0.05) .09 | 0.08 (0.04) .08 | 0.08 (0.04) .08 | 0.09 (0.05) .06 |
| a | Level | 0.71 (0.02) <.01 | 0.62 (0.03) <.01 | 0.62 (0.03) <.01 | 0.65 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .01 | -0.01 (0.01) .41 | -0.01 (0.01) .42 | -0.01 (0.01) .47 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.07 (0.15) .64 | 0.10 (0.15) .50 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .29 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .29 |
| a | Level \* diabetes | --- | --- | --- | -0.02 (0.02) .26 |
| a | Slope \* age | -0.00 (0.00) .25 | -0.00 (0.00) .25 | -0.00 (0.00) .25 | -0.00 (0.00) .34 |
| a | Slope \* education | --- | -0.00 (0.00) .38 | -0.00 (0.00) .36 | -0.00 (0.00) .41 |
| a | Slope \* height | --- | --- | 0.02 (0.05) .73 | 0.00 (0.05) .92 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .73 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .21 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .46 |
| b | Level | 42.76 (0.99) <.01 | 34.93 (1.58) <.01 | 35.16 (1.52) <.01 | 35.54 (1.92) <.01 |
| b | Slope | 0.06 (0.17) .73 | -0.35 (0.31) .26 | -0.29 (0.32) .36 | -0.13 (0.42) .76 |
| b | Level \* age | -0.45 (0.08) <.01 | -0.47 (0.07) <.01 | -0.45 (0.07) <.01 | -0.46 (0.07) <.01 |
| b | Level \* education | --- | 0.94 (0.15) <.01 | 0.86 (0.15) <.01 | 0.87 (0.16) <.01 |
| b | Level \* height | --- | --- | 21.98 (6.30) <.01 | 22.34 (6.41) <.01 |
| b | Level \* smoking | --- | --- | --- | -0.83 (1.07) .44 |
| b | Level \* cardio | --- | --- | --- | 0.86 (1.13) .45 |
| b | Level \* diabetes | --- | --- | --- | 0.07 (1.25) .96 |
| b | Slope \* age | -0.05 (0.02) <.01 | -0.06 (0.02) <.01 | -0.05 (0.02) <.01 | -0.05 (0.02) <.01 |
| b | Slope \* education | --- | 0.05 (0.03) .11 | 0.04 (0.04) .24 | 0.02 (0.04) .62 |
| b | Slope \* height | --- | --- | 1.58 (1.54) .30 | 2.19 (1.59) .17 |
| b | Slope \* smoking | --- | --- | --- | 0.04 (0.23) .85 |
| b | Slope \* cardio | --- | --- | --- | 0.16 (0.27) .55 |
| b | Slope \* diabetes | --- | --- | --- | -0.18 (0.27) .50 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .23 | 0.00 (0.00) .24 | 0.00 (0.00) .25 | 0.00 (0.00) .17 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 89.34 (8.74) <.01 | 77.95 (7.81) <.01 | 72.55 (7.09) <.01 | 71.10 (7.27) <.01 |
| b | Var (Slope) | 0.82 (0.42) .05 | 0.78 (0.41) .06 | 0.78 (0.41) .06 | 0.64 (0.41) .12 |
| b | Var (Residual) | 19.77 (1.52) <.01 | 19.80 (1.53) <.01 | 19.80 (1.52) <.01 | 20.02 (1.61) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .88 | 0.00 (0.00) .74 | 0.00 (0.00) .73 | 0.00 (0.00) .81 |
| b | Covar (Level, Slope) | 2.08 (1.49) .16 | 1.26 (1.41) .37 | 1.12 (1.36) .41 | 1.54 (1.36) .26 |
|  | Correlation of Levels | 0.504 | 0.459 | 0.451 | 0.454 |
|  | Correlation of Slopes | -Inf | -Inf | -Inf | -Inf |
|  | Correlation of Residuals | 0.078 | 0.078 | 0.079 | 0.088 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -3,934 | -3,909 | -3,873 | -3,603 |
|  | AIC | 7,910 | 7,869 | 7,804 | 7,289 |
|  | BIC | 7,991 | 7,965 | 7,915 | 7,444 |

## word\_de

Gender = *male*; Process (a) = *gait*; Process (b) = *word\_de*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.09 (0.02) <.01 | 0.07 (0.02) <.01 | 0.07 (0.02) <.01 | 0.06 (0.02) <.01 |
| ab | Covar (Slopes) | 0.00 (0.00) .07 | 0.00 (0.00) .07 | 0.00 (0.00) .07 | 0.00 (0.00) .13 |
| ab | Covar (Residuals) | -0.00 (0.01) .76 | -0.00 (0.01) .75 | -0.00 (0.01) .76 | -0.00 (0.01) .65 |
| er | Corr (Levels) | 0.36 (0.08) <.01 | 0.30 (0.08) <.01 | 0.30 (0.08) <.01 | 0.29 (0.08) <.01 |
| er | Corr (Slopes) | 0.80 (0.45) .07 | 0.80 (0.44) .07 | 0.80 (0.45) .07 | 0.74 (0.50) .14 |
| er | Corr (Residuals) | -0.01 (0.04) .76 | -0.01 (0.04) .76 | -0.01 (0.04) .76 | -0.02 (0.04) .65 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.65 (0.04) <.01 |
| a | Slope | -0.01 (0.01) .02 | -0.01 (0.01) .60 | -0.01 (0.01) .58 | -0.01 (0.01) .63 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.07 (0.15) .61 | 0.11 (0.15) .48 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .30 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .33 |
| a | Level \* diabetes | --- | --- | --- | -0.02 (0.02) .27 |
| a | Slope \* age | -0.00 (0.00) .18 | -0.00 (0.00) .17 | -0.00 (0.00) .17 | -0.00 (0.00) .28 |
| a | Slope \* education | --- | -0.00 (0.00) .31 | -0.00 (0.00) .30 | -0.00 (0.00) .36 |
| a | Slope \* height | --- | --- | 0.02 (0.05) .73 | 0.00 (0.05) .93 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .77 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .14 |
| a | Slope \* diabetes | --- | --- | --- | 0.00 (0.01) .53 |
| b | Level | 5.91 (0.18) <.01 | 4.71 (0.29) <.01 | 4.72 (0.29) <.01 | 4.79 (0.37) <.01 |
| b | Slope | 0.04 (0.05) .37 | 0.06 (0.09) .45 | 0.07 (0.09) .43 | 0.11 (0.11) .32 |
| b | Level \* age | -0.10 (0.01) <.01 | -0.10 (0.01) <.01 | -0.10 (0.01) <.01 | -0.10 (0.01) <.01 |
| b | Level \* education | --- | 0.14 (0.03) <.01 | 0.14 (0.03) <.01 | 0.14 (0.03) <.01 |
| b | Level \* height | --- | --- | 1.27 (1.33) .34 | 1.64 (1.36) .23 |
| b | Level \* smoking | --- | --- | --- | -0.20 (0.22) .35 |
| b | Level \* cardio | --- | --- | --- | 0.23 (0.24) .34 |
| b | Level \* diabetes | --- | --- | --- | 0.24 (0.26) .36 |
| b | Slope \* age | 0.00 (0.00) .74 | 0.00 (0.00) .78 | 0.00 (0.00) .82 | 0.00 (0.00) .94 |
| b | Slope \* education | --- | -0.00 (0.01) .81 | -0.00 (0.01) .77 | -0.00 (0.01) .69 |
| b | Slope \* height | --- | --- | 0.08 (0.46) .86 | 0.16 (0.45) .73 |
| b | Slope \* smoking | --- | --- | --- | -0.06 (0.07) .37 |
| b | Slope \* cardio | --- | --- | --- | 0.07 (0.07) .28 |
| b | Slope \* diabetes | --- | --- | --- | -0.09 (0.07) .20 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .13 | 0.00 (0.00) .13 | 0.00 (0.00) .14 | 0.00 (0.00) .11 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 2.82 (0.31) <.01 | 2.54 (0.30) <.01 | 2.50 (0.30) <.01 | 2.50 (0.32) <.01 |
| b | Var (Slope) | 0.05 (0.02) .04 | 0.05 (0.02) .04 | 0.05 (0.02) .04 | 0.04 (0.02) .10 |
| b | Var (Residual) | 1.65 (0.11) <.01 | 1.66 (0.11) <.01 | 1.65 (0.11) <.01 | 1.66 (0.11) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .71 | 0.00 (0.00) .82 | 0.00 (0.00) .83 | 0.00 (0.00) .88 |
| b | Covar (Level, Slope) | -0.03 (0.08) .69 | -0.03 (0.08) .67 | -0.03 (0.08) .71 | -0.01 (0.08) .85 |
|  | Correlation of Levels | 0.357 | 0.309 | 0.303 | 0.294 |
|  | Correlation of Slopes | 0.566 | 0.560 | 0.560 | 0.641 |
|  | Correlation of Residuals | -0.011 | -0.011 | -0.011 | -0.016 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -2,199 | -2,182 | -2,166 | -2,013 |
|  | AIC | 4,440 | 4,414 | 4,389 | 4,107 |
|  | BIC | 4,521 | 4,510 | 4,501 | 4,262 |

## word\_im

Gender = *male*; Process (a) = *gait*; Process (b) = *word\_im*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.13 (0.04) <.01 | 0.08 (0.04) .02 | 0.08 (0.04) .02 | 0.07 (0.04) .04 |
| ab | Covar (Slopes) | 0.00 (0.00) .23 | 0.00 (0.00) .22 | 0.00 (0.00) .22 | 0.00 (0.00) .24 |
| ab | Covar (Residuals) | 0.01 (0.01) .54 | 0.01 (0.01) .53 | 0.01 (0.01) .53 | 0.01 (0.01) .69 |
| er | Corr (Levels) | 0.31 (0.09) <.01 | 0.23 (0.10) .02 | 0.23 (0.10) .02 | 0.22 (0.10) .03 |
| er | Corr (Slopes) | 0.64 (0.54) .24 | 0.65 (0.54) .23 | 0.65 (0.54) .23 | 0.62 (0.54) .25 |
| er | Corr (Residuals) | 0.02 (0.04) .54 | 0.03 (0.04) .53 | 0.03 (0.04) .53 | 0.02 (0.04) .68 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.65 (0.04) <.01 |
| a | Slope | -0.01 (0.01) .02 | -0.01 (0.01) .59 | -0.01 (0.01) .55 | -0.01 (0.01) .56 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.08 (0.15) .61 | 0.11 (0.15) .47 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .28 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .33 |
| a | Level \* diabetes | --- | --- | --- | -0.02 (0.02) .26 |
| a | Slope \* age | -0.00 (0.00) .24 | -0.00 (0.00) .23 | -0.00 (0.00) .23 | -0.00 (0.00) .34 |
| a | Slope \* education | --- | -0.00 (0.00) .32 | -0.00 (0.00) .33 | -0.00 (0.00) .40 |
| a | Slope \* height | --- | --- | 0.01 (0.05) .78 | 0.00 (0.05) .98 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .72 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .19 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .46 |
| b | Level | 17.89 (0.32) <.01 | 15.15 (0.55) <.01 | 15.12 (0.56) <.01 | 15.41 (0.69) <.01 |
| b | Slope | 0.21 (0.08) .01 | 0.21 (0.15) .15 | 0.20 (0.15) .18 | 0.20 (0.20) .33 |
| b | Level \* age | -0.14 (0.03) <.01 | -0.15 (0.02) <.01 | -0.15 (0.02) <.01 | -0.15 (0.03) <.01 |
| b | Level \* education | --- | 0.33 (0.05) <.01 | 0.33 (0.05) <.01 | 0.30 (0.06) <.01 |
| b | Level \* height | --- | --- | 1.92 (2.25) .39 | 2.07 (2.30) .37 |
| b | Level \* smoking | --- | --- | --- | -0.27 (0.37) .47 |
| b | Level \* cardio | --- | --- | --- | 0.24 (0.41) .56 |
| b | Level \* diabetes | --- | --- | --- | 0.38 (0.44) .39 |
| b | Slope \* age | 0.00 (0.01) .89 | 0.00 (0.01) .98 | -0.00 (0.01) .94 | -0.00 (0.01) .82 |
| b | Slope \* education | --- | 0.00 (0.02) .90 | 0.00 (0.02) .80 | 0.01 (0.02) .57 |
| b | Slope \* height | --- | --- | -0.24 (0.75) .75 | -0.12 (0.77) .88 |
| b | Slope \* smoking | --- | --- | --- | -0.05 (0.13) .68 |
| b | Slope \* cardio | --- | --- | --- | 0.12 (0.14) .39 |
| b | Slope \* diabetes | --- | --- | --- | -0.14 (0.13) .28 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .15 | 0.00 (0.00) .16 | 0.00 (0.00) .17 | 0.00 (0.00) .12 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 8.15 (0.92) <.01 | 6.68 (0.88) <.01 | 6.62 (0.87) <.01 | 6.53 (0.89) <.01 |
| b | Var (Slope) | 0.11 (0.07) .12 | 0.11 (0.07) .12 | 0.11 (0.07) .12 | 0.11 (0.07) .13 |
| b | Var (Residual) | 5.99 (0.32) <.01 | 6.01 (0.33) <.01 | 5.97 (0.32) <.01 | 5.95 (0.34) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .77 | 0.00 (0.00) .90 | 0.00 (0.00) .92 | 0.00 (0.00) .88 |
| b | Covar (Level, Slope) | 0.26 (0.24) .27 | 0.24 (0.23) .31 | 0.24 (0.23) .29 | 0.19 (0.23) .41 |
|  | Correlation of Levels | 0.312 | 0.230 | 0.226 | 0.213 |
|  | Correlation of Slopes | 0.481 | 0.477 | 0.477 | 0.481 |
|  | Correlation of Residuals | 0.025 | 0.025 | 0.025 | 0.017 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -3,005 | -2,978 | -2,955 | -2,749 |
|  | AIC | 6,052 | 6,006 | 5,969 | 5,579 |
|  | BIC | 6,133 | 6,102 | 6,080 | 5,734 |

## word\_rec

Gender = *male*; Process (a) = *gait*; Process (b) = *word\_rec*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| ab | Covar (Levels) | 0.02 (0.01) .22 | 0.01 (0.01) .43 | 0.01 (0.01) .43 | 0.01 (0.01) .49 |
| ab | Covar (Slopes) | 0.00 (0.00) .71 | 0.00 (0.00) .67 | 0.00 (0.00) .73 | -0.00 (0.00) .65 |
| ab | Covar (Residuals) | 0.00 (0.00) .31 | 0.00 (0.00) .32 | 0.00 (0.00) .32 | 0.00 (0.00) .36 |
| er | Corr (Levels) | 0.12 (0.10) .20 | 0.08 (0.10) .42 | 0.08 (0.10) .42 | 0.07 (0.10) .49 |
| er | Corr (Slopes) | -0.12 (0.33) .72 | -0.14 (0.34) .68 | -0.12 (0.35) .74 | -0.15 (0.35) .67 |
| er | Corr (Residuals) | 0.04 (0.05) .32 | 0.04 (0.05) .32 | 0.04 (0.05) .33 | 0.04 (0.05) .37 |
| a | Level | 0.72 (0.02) <.01 | 0.63 (0.03) <.01 | 0.63 (0.03) <.01 | 0.65 (0.04) <.01 |
| a | Slope | -0.02 (0.01) .02 | -0.01 (0.01) .57 | -0.01 (0.01) .52 | -0.01 (0.01) .57 |
| a | Level \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| a | Level \* education | --- | 0.01 (0.00) <.01 | 0.01 (0.00) <.01 | 0.01 (0.00) .01 |
| a | Level \* height | --- | --- | 0.07 (0.15) .63 | 0.10 (0.15) .49 |
| a | Level \* smoking | --- | --- | --- | -0.02 (0.02) .30 |
| a | Level \* cardio | --- | --- | --- | 0.03 (0.03) .32 |
| a | Level \* diabetes | --- | --- | --- | -0.02 (0.02) .26 |
| a | Slope \* age | -0.00 (0.00) .25 | -0.00 (0.00) .25 | -0.00 (0.00) .26 | -0.00 (0.00) .38 |
| a | Slope \* education | --- | -0.00 (0.00) .31 | -0.00 (0.00) .30 | -0.00 (0.00) .35 |
| a | Slope \* height | --- | --- | 0.02 (0.05) .64 | 0.01 (0.05) .84 |
| a | Slope \* smoking | --- | --- | --- | 0.00 (0.01) .70 |
| a | Slope \* cardio | --- | --- | --- | -0.01 (0.01) .17 |
| a | Slope \* diabetes | --- | --- | --- | 0.01 (0.01) .48 |
| b | Level | 9.76 (0.08) <.01 | 9.45 (0.15) <.01 | 9.42 (0.15) <.01 | 9.38 (0.20) <.01 |
| b | Slope | 0.02 (0.02) .31 | 0.06 (0.05) .23 | 0.06 (0.05) .26 | 0.08 (0.06) .21 |
| b | Level \* age | -0.04 (0.01) <.01 | -0.04 (0.01) <.01 | -0.04 (0.01) <.01 | -0.04 (0.01) <.01 |
| b | Level \* education | --- | 0.04 (0.02) .02 | 0.04 (0.02) .02 | 0.04 (0.02) .01 |
| b | Level \* height | --- | --- | 0.89 (0.70) .20 | 0.85 (0.74) .25 |
| b | Level \* smoking | --- | --- | --- | -0.20 (0.14) .13 |
| b | Level \* cardio | --- | --- | --- | 0.10 (0.16) .54 |
| b | Level \* diabetes | --- | --- | --- | 0.25 (0.14) .06 |
| b | Slope \* age | 0.00 (0.00) .74 | 0.00 (0.00) .73 | 0.00 (0.00) .79 | 0.00 (0.00) .94 |
| b | Slope \* education | --- | -0.00 (0.00) .47 | -0.00 (0.01) .62 | -0.00 (0.01) .44 |
| b | Slope \* height | --- | --- | -0.39 (0.24) .10 | -0.34 (0.25) .17 |
| b | Slope \* smoking | --- | --- | --- | -0.02 (0.04) .69 |
| b | Slope \* cardio | --- | --- | --- | 0.07 (0.04) .11 |
| b | Slope \* diabetes | --- | --- | --- | -0.03 (0.04) .47 |
| a | Var (Level) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| a | Var (Slope) | 0.00 (0.00) .24 | 0.00 (0.00) .24 | 0.00 (0.00) .26 | 0.00 (0.00) .17 |
| a | Var (Residual) | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 | 0.02 (0.00) <.01 |
| b | Var (Level) | 0.97 (0.25) <.01 | 0.95 (0.24) <.01 | 0.88 (0.23) <.01 | 0.91 (0.24) <.01 |
| b | Var (Slope) | 0.03 (0.02) .07 | 0.03 (0.02) .07 | 0.03 (0.02) .07 | 0.03 (0.02) .08 |
| b | Var (Residual) | 0.44 (0.07) <.01 | 0.44 (0.07) <.01 | 0.44 (0.07) <.01 | 0.45 (0.08) <.01 |
| a | Covar (Level, Slope) | 0.00 (0.00) .98 | 0.00 (0.00) .87 | 0.00 (0.00) .84 | 0.00 (0.00) .94 |
| b | Covar (Level, Slope) | -0.11 (0.06) .05 | -0.11 (0.06) .06 | -0.10 (0.05) .07 | -0.10 (0.05) .06 |
|  | Correlation of Levels | 0.122 | 0.082 | 0.077 | 0.070 |
|  | Correlation of Slopes | NaN | NaN | NaN | -0.183 |
|  | Correlation of Residuals | 0.042 | 0.042 | 0.042 | 0.041 |
|  | N | 349 | 349 | 344 | 321 |
|  | occasions | 4 | 4 | 4 | 4 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -1,371 | -1,363 | -1,342 | -1,258 |
|  | AIC | 2,785 | 2,776 | 2,743 | 2,599 |
|  | BIC | 2,866 | 2,872 | 2,854 | 2,753 |

## Summary

Study = *MAP*; Gender = *male*; Process (a) = *gait*

Computed correlations:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus |
| Correlation of Levels | bnt | 0.35 | 0.30 | 0.30 | 0.31 |
| Correlation of Levels | bstory\_de | 0.42 | 0.38 | 0.38 | 0.39 |
| Correlation of Levels | bstory\_im | 0.37 | 0.32 | 0.32 | 0.36 |
| Correlation of Levels | categories | 0.45 | 0.39 | 0.39 | 0.39 |
| Correlation of Levels | digit\_b | 0.30 | 0.22 | 0.22 | 0.27 |
| Correlation of Levels | digit\_f | 0.25 | 0.16 | 0.17 | 0.17 |
| Correlation of Levels | digit\_o | 0.22 | 0.14 | 0.13 | 0.14 |
| Correlation of Levels | ideas | 0.23 | 0.21 | 0.21 | 0.18 |
| Correlation of Levels | line | 0.28 | 0.20 | 0.19 | 0.15 |
| Correlation of Levels | logic\_de | 0.26 | 0.20 | 0.19 | 0.24 |
| Correlation of Levels | logic\_im | 0.26 | 0.18 | 0.18 | 0.22 |
| Correlation of Levels | matrices | 0.44 | 0.37 | 0.36 | 0.36 |
| Correlation of Levels | mmse | 0.53 | 0.48 | 0.48 | 0.49 |
| Correlation of Levels | nart | 0.28 | 0.17 | 0.16 | 0.19 |
| Correlation of Levels | num\_comp | 0.31 | 0.23 | 0.22 | 0.22 |
| Correlation of Levels | symbol | 0.50 | 0.46 | 0.45 | 0.45 |
| Correlation of Levels | word\_de | 0.36 | 0.31 | 0.30 | 0.29 |
| Correlation of Levels | word\_im | 0.31 | 0.23 | 0.23 | 0.21 |
| Correlation of Levels | word\_rec | 0.12 | 0.08 | 0.08 | 0.07 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus |
| Correlation of Slopes | bnt | -Inf | -Inf | -Inf | -0.41 |
| Correlation of Slopes | bstory\_de | 0.46 | 0.47 | 0.50 | 0.52 |
| Correlation of Slopes | bstory\_im | 0.60 | 0.63 | 0.63 | 0.65 |
| Correlation of Slopes | categories | Inf | Inf | Inf | 0.56 |
| Correlation of Slopes | digit\_b | Inf | Inf | Inf | 0.21 |
| Correlation of Slopes | digit\_f | Inf | Inf | Inf | 0.29 |
| Correlation of Slopes | digit\_o | NaN | NaN | NaN | -0.41 |
| Correlation of Slopes | ideas | NaN | NaN | NaN | -0.20 |
| Correlation of Slopes | line | -Inf | -Inf | -Inf | -0.44 |
| Correlation of Slopes | logic\_de | Inf | Inf | Inf | 0.35 |
| Correlation of Slopes | logic\_im | Inf | Inf | Inf | 0.63 |
| Correlation of Slopes | matrices | 0.42 | 0.41 | Inf | 0.44 |
| Correlation of Slopes | mmse | Inf | Inf | Inf | 0.22 |
| Correlation of Slopes | nart | Inf | Inf | Inf | 0.22 |
| Correlation of Slopes | num\_comp | -Inf | -Inf | -Inf | -Inf |
| Correlation of Slopes | symbol | -Inf | -Inf | -Inf | -Inf |
| Correlation of Slopes | word\_de | 0.57 | 0.56 | 0.56 | 0.64 |
| Correlation of Slopes | word\_im | 0.48 | 0.48 | 0.48 | 0.48 |
| Correlation of Slopes | word\_rec | NaN | NaN | NaN | -0.18 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus |
| Correlation of Residuals | bnt | -0.03 | -0.04 | -0.04 | -0.03 |
| Correlation of Residuals | bstory\_de | -0.06 | -0.06 | -0.06 | -0.06 |
| Correlation of Residuals | bstory\_im | -0.05 | -0.06 | -0.05 | -0.07 |
| Correlation of Residuals | categories | 0.02 | 0.02 | 0.02 | 0.04 |
| Correlation of Residuals | digit\_b | -0.01 | -0.01 | -0.01 | 0.00 |
| Correlation of Residuals | digit\_f | 0.01 | 0.01 | 0.01 | 0.01 |
| Correlation of Residuals | digit\_o | -0.01 | -0.01 | -0.01 | -0.01 |
| Correlation of Residuals | ideas | 0.00 | 0.00 | 0.00 | 0.02 |
| Correlation of Residuals | line | 0.06 | 0.06 | 0.06 | 0.08 |
| Correlation of Residuals | logic\_de | 0.00 | 0.00 | 0.00 | -0.02 |
| Correlation of Residuals | logic\_im | -0.00 | -0.00 | -0.00 | -0.02 |
| Correlation of Residuals | matrices | 0.10 | 0.10 | 0.10 | 0.11 |
| Correlation of Residuals | mmse | 0.03 | 0.03 | 0.04 | 0.03 |
| Correlation of Residuals | nart | 0.02 | 0.02 | 0.02 | 0.02 |
| Correlation of Residuals | num\_comp | 0.08 | 0.08 | 0.08 | 0.07 |
| Correlation of Residuals | symbol | 0.08 | 0.08 | 0.08 | 0.09 |
| Correlation of Residuals | word\_de | -0.01 | -0.01 | -0.01 | -0.02 |
| Correlation of Residuals | word\_im | 0.03 | 0.03 | 0.03 | 0.02 |
| Correlation of Residuals | word\_rec | 0.04 | 0.04 | 0.04 | 0.04 |

P-values for corresponding covariances:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus |
| Covariance of Levels | bnt | 0.00 | 0.00 | 0.00 | 0.01 |
| Covariance of Levels | bstory\_de | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | bstory\_im | 0.00 | 0.01 | 0.01 | 0.00 |
| Covariance of Levels | categories | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | digit\_b | 0.00 | 0.02 | 0.02 | 0.01 |
| Covariance of Levels | digit\_f | 0.01 | 0.09 | 0.07 | 0.07 |
| Covariance of Levels | digit\_o | 0.02 | 0.17 | 0.19 | 0.21 |
| Covariance of Levels | ideas | 0.09 | 0.10 | 0.11 | 0.15 |
| Covariance of Levels | line | 0.00 | 0.02 | 0.03 | 0.10 |
| Covariance of Levels | logic\_de | 0.00 | 0.03 | 0.04 | 0.01 |
| Covariance of Levels | logic\_im | 0.01 | 0.08 | 0.10 | 0.04 |
| Covariance of Levels | matrices | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | mmse | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | nart | 0.00 | 0.04 | 0.05 | 0.03 |
| Covariance of Levels | num\_comp | 0.00 | 0.00 | 0.00 | 0.01 |
| Covariance of Levels | symbol | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | word\_de | 0.00 | 0.00 | 0.00 | 0.00 |
| Covariance of Levels | word\_im | 0.00 | 0.02 | 0.02 | 0.04 |
| Covariance of Levels | word\_rec | 0.22 | 0.43 | 0.43 | 0.49 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus |
| Covariance of Slopes | bnt | 0.40 | 0.38 | 0.41 | 0.31 |
| Covariance of Slopes | bstory\_de | 0.36 | 0.38 | 0.42 | 0.41 |
| Covariance of Slopes | bstory\_im | 0.19 | 0.21 | 0.21 | 0.23 |
| Covariance of Slopes | categories | 0.03 | 0.03 | 0.04 | 0.04 |
| Covariance of Slopes | digit\_b | 0.69 | 0.68 | 0.72 | 0.68 |
| Covariance of Slopes | digit\_f | 0.57 | 0.60 | 0.62 | 0.69 |
| Covariance of Slopes | digit\_o | 0.83 | 0.86 | 0.85 | 0.74 |
| Covariance of Slopes | ideas | 0.60 | 0.56 | 0.55 | 0.46 |
| Covariance of Slopes | line | 0.44 | 0.46 | 0.42 | 0.22 |
| Covariance of Slopes | logic\_de | 0.09 | 0.08 | 0.09 | 0.11 |
| Covariance of Slopes | logic\_im | 0.29 | 0.31 | 0.31 | 0.36 |
| Covariance of Slopes | matrices | 0.35 | 0.36 | 0.41 | 0.36 |
| Covariance of Slopes | mmse | 0.54 | 0.63 | 0.68 | 0.49 |
| Covariance of Slopes | nart | 0.48 | 0.53 | 0.54 | 0.56 |
| Covariance of Slopes | num\_comp | 0.41 | 0.33 | 0.33 | 0.28 |
| Covariance of Slopes | symbol | 0.38 | 0.42 | 0.41 | 0.35 |
| Covariance of Slopes | word\_de | 0.07 | 0.07 | 0.07 | 0.13 |
| Covariance of Slopes | word\_im | 0.23 | 0.22 | 0.22 | 0.24 |
| Covariance of Slopes | word\_rec | 0.71 | 0.67 | 0.73 | 0.65 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus |
| Covariance of Residuals | bnt | 0.36 | 0.34 | 0.34 | 0.48 |
| Covariance of Residuals | bstory\_de | 0.07 | 0.07 | 0.08 | 0.14 |
| Covariance of Residuals | bstory\_im | 0.13 | 0.13 | 0.14 | 0.06 |
| Covariance of Residuals | categories | 0.57 | 0.56 | 0.54 | 0.38 |
| Covariance of Residuals | digit\_b | 0.89 | 0.88 | 0.91 | 0.96 |
| Covariance of Residuals | digit\_f | 0.84 | 0.86 | 0.84 | 0.77 |
| Covariance of Residuals | digit\_o | 0.85 | 0.85 | 0.84 | 0.92 |
| Covariance of Residuals | ideas | 0.98 | 0.97 | 0.98 | 0.80 |
| Covariance of Residuals | line | 0.15 | 0.16 | 0.15 | 0.06 |
| Covariance of Residuals | logic\_de | 0.97 | 0.99 | 1.00 | 0.62 |
| Covariance of Residuals | logic\_im | 0.97 | 0.96 | 0.97 | 0.68 |
| Covariance of Residuals | matrices | 0.01 | 0.01 | 0.01 | 0.01 |
| Covariance of Residuals | mmse | 0.42 | 0.42 | 0.40 | 0.50 |
| Covariance of Residuals | nart | 0.66 | 0.65 | 0.64 | 0.70 |
| Covariance of Residuals | num\_comp | 0.05 | 0.05 | 0.05 | 0.06 |
| Covariance of Residuals | symbol | 0.09 | 0.09 | 0.08 | 0.06 |
| Covariance of Residuals | word\_de | 0.76 | 0.75 | 0.76 | 0.65 |
| Covariance of Residuals | word\_im | 0.54 | 0.53 | 0.53 | 0.69 |
| Covariance of Residuals | word\_rec | 0.31 | 0.32 | 0.32 | 0.36 |

#Session Info

R version 3.3.1 (2016-06-21)  
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] stats graphics grDevices utils datasets methods base   
  
other attached packages:  
[1] knitr\_1.14 ggplot2\_2.2.0 IalsaSynthesis\_0.1.8.9000 MplusAutomation\_0.6-4   
[5] magrittr\_1.5   
  
loaded via a namespace (and not attached):  
 [1] Rcpp\_0.12.7 formatR\_1.4 plyr\_1.8.4 highr\_0.6 tools\_3.3.1 boot\_1.3-18   
 [7] digest\_0.6.10 evaluate\_0.10 tibble\_1.2 gtable\_0.2.0 lattice\_0.20-34 texreg\_1.36.7   
[13] DBI\_0.5-1 yaml\_2.1.13 proto\_0.3-10 coda\_0.18-1 dplyr\_0.5.0 stringr\_1.1.0   
[19] htmlwidgets\_0.7 grid\_3.3.1 DT\_0.2 data.table\_1.9.6 R6\_2.2.0 rmarkdown\_1.1   
[25] gsubfn\_0.6-6 pander\_0.6.0 tidyr\_0.6.0 reshape2\_1.4.1 readr\_1.0.0 scales\_0.4.1   
[31] htmltools\_0.3.5 rsconnect\_0.5 assertthat\_0.1 testit\_0.5 colorspace\_1.2-7 xtable\_1.8-2   
[37] stringi\_1.1.2 lazyeval\_0.2.0 munsell\_0.4.3 chron\_2.3-47