EAS : Seed report

Date: 2016-12-04

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

# Available models

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

|  |  |  |
| --- | --- | --- |
| process\_a | process\_b | n\_models |
| gait | block | 10 |
| gait | bnt | 10 |
| gait | categories | 10 |
| gait | digit\_tot | 10 |
| gait | fas | 10 |
| gait | information | 8 |
| gait | logic\_tot | 10 |
| gait | mmse | 8 |
| gait | symbol | 10 |
| gait | trailsb | 11 |
| gait | waisvocab | 10 |
| gait | word\_im | 2 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| study\_name | subgroup | model\_type | process\_a | process\_b | n\_models |
| eas | female | a | gait | block | 1 |
| eas | female | a | gait | bnt | 1 |
| eas | female | a | gait | categories | 1 |
| eas | female | a | gait | digit\_tot | 1 |
| eas | female | a | gait | fas | 1 |
| eas | female | a | gait | information | 1 |
| eas | female | a | gait | logic\_tot | 1 |
| eas | female | a | gait | mmse | 1 |
| eas | female | a | gait | symbol | 1 |
| eas | female | a | gait | trailsb | 1 |
| eas | female | a | gait | waisvocab | 1 |
| eas | female | ae | gait | block | 1 |
| eas | female | ae | gait | bnt | 1 |
| eas | female | ae | gait | categories | 1 |
| eas | female | ae | gait | digit\_tot | 1 |
| eas | female | ae | gait | fas | 1 |
| eas | female | ae | gait | information | 1 |
| eas | female | ae | gait | logic\_tot | 1 |
| eas | female | ae | gait | mmse | 1 |
| eas | female | ae | gait | symbol | 1 |
| eas | female | ae | gait | trailsb | 1 |
| eas | female | ae | gait | waisvocab | 1 |
| eas | female | aeh | gait | block | 1 |
| eas | female | aeh | gait | bnt | 1 |
| eas | female | aeh | gait | categories | 1 |
| eas | female | aeh | gait | digit\_tot | 1 |
| eas | female | aeh | gait | fas | 1 |
| eas | female | aeh | gait | information | 1 |
| eas | female | aeh | gait | logic\_tot | 1 |
| eas | female | aeh | gait | mmse | 1 |
| eas | female | aeh | gait | symbol | 1 |
| eas | female | aeh | gait | trailsb | 1 |
| eas | female | aeh | gait | waisvocab | 1 |
| eas | female | aehplus | gait | block | 1 |
| eas | female | aehplus | gait | bnt | 1 |
| eas | female | aehplus | gait | categories | 1 |
| eas | female | aehplus | gait | digit\_tot | 1 |
| eas | female | aehplus | gait | fas | 1 |
| eas | female | aehplus | gait | logic\_tot | 1 |
| eas | female | aehplus | gait | symbol | 1 |
| eas | female | aehplus | gait | trailsb | 1 |
| eas | female | aehplus | gait | waisvocab | 1 |
| eas | female | aehplus | gait | word\_im | 1 |
| eas | female | full | gait | block | 1 |
| eas | female | full | gait | bnt | 1 |
| eas | female | full | gait | categories | 1 |
| eas | female | full | gait | digit\_tot | 1 |
| eas | female | full | gait | fas | 1 |
| eas | female | full | gait | information | 1 |
| eas | female | full | gait | logic\_tot | 1 |
| eas | female | full | gait | mmse | 1 |
| eas | female | full | gait | symbol | 1 |
| eas | female | full | gait | trailsb | 1 |
| eas | female | full | gait | waisvocab | 1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| study\_name | subgroup | model\_type | process\_a | process\_b | n\_models |
| eas | male | a | gait | block | 1 |
| eas | male | a | gait | bnt | 1 |
| eas | male | a | gait | categories | 1 |
| eas | male | a | gait | digit\_tot | 1 |
| eas | male | a | gait | fas | 1 |
| eas | male | a | gait | information | 1 |
| eas | male | a | gait | logic\_tot | 1 |
| eas | male | a | gait | mmse | 1 |
| eas | male | a | gait | symbol | 1 |
| eas | male | a | gait | trailsb | 1 |
| eas | male | a | gait | waisvocab | 1 |
| eas | male | ae | gait | block | 1 |
| eas | male | ae | gait | bnt | 1 |
| eas | male | ae | gait | categories | 1 |
| eas | male | ae | gait | digit\_tot | 1 |
| eas | male | ae | gait | fas | 1 |
| eas | male | ae | gait | information | 1 |
| eas | male | ae | gait | logic\_tot | 1 |
| eas | male | ae | gait | mmse | 1 |
| eas | male | ae | gait | symbol | 1 |
| eas | male | ae | gait | trailsb | 1 |
| eas | male | ae | gait | waisvocab | 1 |
| eas | male | aeh | gait | block | 1 |
| eas | male | aeh | gait | bnt | 1 |
| eas | male | aeh | gait | categories | 1 |
| eas | male | aeh | gait | digit\_tot | 1 |
| eas | male | aeh | gait | fas | 1 |
| eas | male | aeh | gait | information | 1 |
| eas | male | aeh | gait | logic\_tot | 1 |
| eas | male | aeh | gait | mmse | 1 |
| eas | male | aeh | gait | symbol | 1 |
| eas | male | aeh | gait | trailsb | 1 |
| eas | male | aeh | gait | waisvocab | 1 |
| eas | male | aehplus | gait | block | 1 |
| eas | male | aehplus | gait | bnt | 1 |
| eas | male | aehplus | gait | categories | 1 |
| eas | male | aehplus | gait | digit\_tot | 1 |
| eas | male | aehplus | gait | fas | 1 |
| eas | male | aehplus | gait | logic\_tot | 1 |
| eas | male | aehplus | gait | symbol | 1 |
| eas | male | aehplus | gait | trailsb | 2 |
| eas | male | aehplus | gait | waisvocab | 1 |
| eas | male | aehplus | gait | word\_im | 1 |
| eas | male | full | gait | block | 1 |
| eas | male | full | gait | bnt | 1 |
| eas | male | full | gait | categories | 1 |
| eas | male | full | gait | digit\_tot | 1 |
| eas | male | full | gait | fas | 1 |
| eas | male | full | gait | information | 1 |
| eas | male | full | gait | logic\_tot | 1 |
| eas | male | full | gait | mmse | 1 |
| eas | male | full | gait | symbol | 1 |
| eas | male | full | gait | trailsb | 1 |
| eas | male | full | gait | waisvocab | 1 |

# female

Gender = *female*; Model type: *aehplus*; Process (a) = *gait*; Process (b): *block*, *bnt*, *categories*, *digit\_tot*, *fas*, *information*, *logic\_tot*, *mmse*, *symbol*, *trailsb*, *waisvocab*, *word\_im*

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| process | label | block | bnt | categories | digit\_tot | fas | logic\_tot | symbol | trailsb | waisvocab | word\_im | mean(sd) |
| a | Level | 106.16 (6.18) <.01 | 106.39 (5.93) <.01 | 106.77 (5.99) <.01 | 105.69 (5.90) <.01 | 106.22 (5.87) <.01 | 106.16 (6.01) <.01 | 106.58 (5.78) <.01 | 106.84 (5.94) <.01 | 105.74 (5.92) <.01 | 106.29 (5.88) <.01 | 106.28(0.38) |
| a | Slope | -3.50 (1.55) .02 | -3.49 (1.60) .03 | -3.71 (1.65) .02 | -3.13 (1.49) .04 | -3.50 (1.58) .03 | -3.29 (1.62) .04 | -3.54 (1.51) .02 | -3.56 (1.59) .03 | -3.26 (1.61) .04 | -3.41 (1.58) .03 | -3.44(0.17) |
| a | Level \* age | -1.56 (0.38) <.01 | -1.56 (0.37) <.01 | -1.62 (0.41) <.01 | -1.50 (0.37) <.01 | -1.53 (0.36) <.01 | -1.55 (0.38) <.01 | -1.58 (0.37) <.01 | -1.57 (0.38) <.01 | -1.46 (0.37) <.01 | -1.55 (0.38) <.01 | -1.55(0.04) |
| a | Level \* education | 0.60 (0.59) .31 | 0.59 (0.59) .32 | 0.56 (0.56) .31 | 0.61 (0.56) .27 | 0.54 (0.54) .32 | 0.60 (0.57) .30 | 0.51 (0.55) .35 | 0.52 (0.57) .36 | 0.58 (0.57) .31 | 0.60 (0.56) .29 | 0.57(0.04) |
| a | Level \* height | 0.11 (0.28) .70 | 0.10 (0.28) .73 | 0.11 (0.28) .70 | 0.16 (0.28) .56 | 0.13 (0.28) .64 | 0.11 (0.29) .70 | 0.10 (0.29) .74 | 0.08 (0.29) .77 | 0.14 (0.28) .62 | 0.16 (0.28) .56 | 0.12(0.03) |
| a | Level \* smoking | 3.17 (2.80) .26 | 3.23 (2.55) .20 | 3.45 (2.69) .20 | 3.34 (2.67) .21 | 3.13 (2.55) .22 | 3.24 (2.50) .20 | 3.27 (2.47) .19 | 3.06 (2.76) .27 | 3.62 (2.79) .20 | 2.72 (2.55) .29 | 3.22(0.24) |
| a | Level \* cardio | -7.27 (3.43) .03 | -7.41 (3.49) .03 | -7.50 (3.33) .02 | -7.43 (3.29) .02 | -6.71 (3.15) .03 | -7.30 (3.18) .02 | -6.84 (3.38) .04 | -7.24 (3.63) .05 | -7.84 (3.21) .01 | -6.92 (3.22) .03 | -7.25(0.34) |
| a | Level \* diabetes | -15.52 (4.46) <.01 | -15.34 (4.73) <.01 | -15.44 (4.57) <.01 | -15.46 (4.29) <.01 | -14.88 (4.34) <.01 | -15.51 (4.53) <.01 | -16.04 (4.40) <.01 | -15.47 (4.53) <.01 | -14.37 (4.48) <.01 | -15.59 (4.34) <.01 | -15.36(0.45) |
| a | Slope \* age | -0.07 (0.10) .47 | -0.07 (0.10) .47 | -0.08 (0.12) .47 | -0.10 (0.10) .29 | -0.07 (0.10) .50 | -0.09 (0.10) .38 | -0.09 (0.10) .37 | -0.08 (0.11) .46 | -0.10 (0.11) .34 | -0.10 (0.10) .34 | -0.09(0.01) |
| a | Slope \* education | 0.12 (0.16) .47 | 0.12 (0.17) .48 | 0.14 (0.16) .37 | 0.10 (0.16) .52 | 0.12 (0.15) .43 | 0.10 (0.18) .56 | 0.14 (0.15) .36 | 0.13 (0.16) .41 | 0.12 (0.17) .48 | 0.12 (0.16) .46 | 0.12(0.01) |
| a | Slope \* height | 0.03 (0.07) .61 | 0.04 (0.07) .56 | 0.03 (0.08) .67 | 0.01 (0.06) .83 | 0.04 (0.07) .56 | 0.03 (0.07) .71 | 0.02 (0.07) .72 | 0.04 (0.07) .58 | 0.03 (0.06) .65 | 0.03 (0.08) .71 | 0.03(0.01) |
| a | Slope \* smoking | -0.30 (0.86) .73 | -0.30 (0.84) .72 | -0.29 (0.86) .74 | -0.34 (0.86) .69 | -0.29 (0.84) .73 | -0.31 (0.88) .72 | -0.30 (0.84) .72 | -0.26 (0.85) .76 | -0.34 (0.85) .69 | -0.33 (0.85) .70 | -0.30(0.03) |
| a | Slope \* cardio | 0.54 (1.27) .67 | 0.59 (1.25) .64 | 0.58 (1.23) .64 | 0.55 (1.25) .66 | 0.49 (1.19) .68 | 0.54 (1.26) .67 | 0.37 (1.18) .75 | 0.63 (1.26) .62 | 0.64 (1.28) .62 | 0.59 (1.33) .66 | 0.55(0.08) |
| a | Slope \* diabetes | 0.90 (1.38) .51 | 0.76 (1.47) .60 | 0.93 (1.39) .51 | 0.79 (1.26) .53 | 0.79 (1.28) .54 | 0.96 (1.42) .50 | 0.96 (1.33) .47 | 0.72 (1.37) .60 | 0.73 (1.36) .59 | 0.74 (1.35) .58 | 0.83(0.10) |
| b | Level | 15.52 (1.55) <.01 | 10.33 (0.42) <.01 | 37.31 (1.36) <.01 | 12.21 (0.60) <.01 | 28.01 (2.12) <.01 | 17.83 (1.14) <.01 | 35.89 (2.59) <.01 | 154.13 (11.83) <.01 | 36.07 (1.88) <.01 | 34.19 (0.97) <.01 | --- |
| b | Slope | 1.08 (0.45) .02 | 0.06 (0.12) .65 | -0.52 (0.40) .19 | 0.30 (0.15) .05 | 0.42 (0.54) .44 | -0.07 (0.37) .84 | 1.23 (0.67) .06 | 1.03 (3.99) .80 | -0.74 (0.55) .18 | 0.18 (0.32) .58 | --- |
| b | Level \* age | -0.14 (0.11) .18 | -0.05 (0.03) .05 | -0.28 (0.10) <.01 | -0.03 (0.04) .44 | -0.22 (0.14) .11 | -0.25 (0.08) <.01 | -0.38 (0.15) .01 | 2.65 (0.81) <.01 | 0.04 (0.14) .76 | -0.16 (0.07) .03 | --- |
| b | Level \* education | 0.95 (0.15) <.01 | 0.28 (0.04) <.01 | 0.68 (0.14) <.01 | 0.29 (0.06) <.01 | 1.29 (0.21) <.01 | 0.68 (0.11) <.01 | 1.56 (0.23) <.01 | -6.58 (1.17) <.01 | 1.65 (0.20) <.01 | 0.08 (0.10) .41 | --- |
| b | Level \* height | -0.01 (0.12) .91 | -0.00 (0.03) .89 | -0.10 (0.10) .29 | 0.07 (0.05) .10 | -0.17 (0.16) .28 | 0.05 (0.09) .57 | 0.13 (0.19) .49 | 0.40 (1.00) .69 | -0.00 (0.15) .99 | 0.07 (0.08) .40 | --- |
| b | Level \* smoking | 0.53 (0.52) .31 | 0.05 (0.17) .79 | 0.42 (0.61) .48 | 0.24 (0.33) .47 | 1.07 (0.98) .28 | 0.62 (0.48) .19 | 1.07 (1.06) .31 | -5.13 (5.39) .34 | 0.47 (1.02) .64 | -1.12 (0.43) .01 | --- |
| b | Level \* cardio | -0.35 (1.10) .75 | 0.03 (0.25) .90 | 0.18 (1.25) .88 | -0.46 (0.50) .36 | 0.37 (1.48) .80 | -1.07 (0.98) .27 | -2.54 (2.06) .22 | 10.50 (7.63) .17 | -0.50 (1.33) .70 | 0.68 (1.19) .57 | --- |
| b | Level \* diabetes | -4.18 (1.40) <.01 | -0.82 (0.39) .04 | -3.79 (1.26) <.01 | -1.37 (0.54) .01 | -4.50 (1.85) .01 | 0.16 (1.12) .89 | -4.65 (2.01) .02 | 28.85 (11.31) .01 | -2.91 (1.75) .10 | -1.20 (1.01) .23 | --- |
| b | Slope \* age | -0.03 (0.03) .31 | -0.01 (0.01) .12 | -0.04 (0.02) .06 | -0.01 (0.01) .24 | -0.03 (0.03) .37 | -0.01 (0.02) .80 | -0.10 (0.04) .01 | 0.18 (0.26) .48 | -0.03 (0.04) .43 | -0.07 (0.02) <.01 | --- |
| b | Slope \* education | -0.08 (0.04) .09 | -0.00 (0.01) .95 | 0.06 (0.04) .15 | -0.01 (0.01) .35 | 0.05 (0.06) .40 | 0.04 (0.04) .25 | -0.01 (0.06) .90 | 0.05 (0.36) .89 | 0.06 (0.06) .32 | 0.03 (0.03) .31 | --- |
| b | Slope \* height | -0.01 (0.04) .75 | 0.00 (0.01) .79 | 0.02 (0.03) .53 | -0.03 (0.01) .02 | 0.06 (0.04) .15 | -0.01 (0.02) .79 | -0.04 (0.04) .40 | -0.10 (0.41) .80 | 0.00 (0.04) .98 | -0.04 (0.02) .10 | --- |
| b | Slope \* smoking | -0.11 (0.22) .60 | 0.01 (0.08) .86 | -0.05 (0.24) .82 | -0.01 (0.09) .95 | 0.01 (0.32) .97 | -0.16 (0.24) .49 | 0.16 (0.35) .64 | -0.26 (2.20) .91 | 0.12 (0.34) .72 | 0.04 (0.20) .84 | --- |
| b | Slope \* cardio | -0.21 (0.30) .49 | -0.00 (0.10) .96 | 0.06 (0.29) .83 | 0.00 (0.11) .98 | -0.31 (0.27) .26 | 0.43 (0.28) .12 | 0.03 (0.49) .94 | 1.44 (2.15) .50 | -0.15 (0.46) .74 | -0.04 (0.26) .88 | --- |
| b | Slope \* diabetes | 0.64 (0.37) .08 | -0.01 (0.10) .90 | -0.00 (0.34) .99 | 0.16 (0.14) .24 | -0.20 (0.40) .62 | -0.27 (0.32) .40 | -0.75 (0.51) .14 | 0.13 (3.87) .97 | 0.24 (0.47) .60 | -0.26 (0.27) .34 | --- |
| a | Var (Level) | 356.80 (57.56) <.01 | 359.46 (59.48) <.01 | 352.09 (56.29) <.01 | 356.87 (56.35) <.01 | 363.39 (56.24) <.01 | 357.50 (57.41) <.01 | 352.22 (56.81) <.01 | 359.61 (57.41) <.01 | 361.28 (58.52) <.01 | 354.92 (58.41) <.01 | 357.41(3.68) |
| a | Var (Slope) | 6.33 (2.53) .01 | 6.53 (2.71) .02 | 6.55 (2.58) .01 | 6.29 (2.39) .01 | 6.77 (2.54) .01 | 6.55 (2.59) .01 | 6.20 (2.36) .01 | 6.33 (2.62) .02 | 6.75 (2.56) .01 | 6.46 (2.51) .01 | 6.48(0.19) |
| a | Var (Residual) | 63.28 (5.98) <.01 | 63.06 (5.97) <.01 | 63.22 (5.82) <.01 | 63.62 (5.72) <.01 | 63.09 (6.01) <.01 | 62.95 (5.72) <.01 | 63.67 (5.88) <.01 | 63.43 (6.14) <.01 | 62.77 (5.87) <.01 | 63.32 (5.87) <.01 | 63.24(0.29) |
| a | Covar (Level, Slope) | -5.62 (9.33) .55 | -6.26 (11.02) .57 | -4.08 (9.45) .67 | -5.29 (9.19) .56 | -7.74 (9.63) .42 | -5.62 (9.66) .56 | -3.75 (8.80) .67 | -6.11 (9.12) .50 | -6.53 (9.85) .51 | -3.92 (9.43) .68 | -5.49(1.28) |
| b | Var (Level) | 47.66 (6.39) <.01 | 3.71 (0.60) <.01 | 41.22 (5.34) <.01 | 7.27 (0.89) <.01 | 100.29 (13.00) <.01 | 22.81 (4.18) <.01 | 143.21 (15.94) <.01 | 2050.71 (468.10) <.01 | 90.89 (13.53) <.01 | 16.65 (2.91) <.01 | --- |
| b | Var (Slope) | 0.85 (0.46) .06 | 0.01 (0.03) .67 | 0.64 (0.32) .05 | 0.11 (0.06) .06 | 0.98 (0.64) .12 | 0.28 (0.36) .43 | 2.37 (0.75) <.01 | 53.20 (35.71) .14 | 0.35 (0.66) .60 | 0.18 (0.30) .55 | --- |
| b | Var (Residual) | 19.99 (1.01) <.01 | 1.89 (0.10) <.01 | 17.33 (1.00) <.01 | 2.66 (0.15) <.01 | 27.81 (1.57) <.01 | 15.43 (0.85) <.01 | 28.13 (1.51) <.01 | 1746.80 (81.31) <.01 | 40.92 (1.84) <.01 | 12.84 (0.63) <.01 | --- |
| b | Covar (Level, Slope) | -1.64 (1.47) .26 | 0.07 (0.12) .57 | 1.49 (1.13) .19 | -0.08 (0.19) .66 | 0.96 (2.51) .70 | -0.13 (1.00) .90 | -6.32 (2.91) .03 | -16.15 (117.13) .89 | -1.83 (2.65) .49 | 0.61 (0.90) .50 | --- |
| ab | Covar (Levels) | 16.75 (14.11) .23 | -0.88 (4.93) .86 | 11.43 (13.72) .40 | 12.35 (6.17) .04 | 67.83 (23.06) <.01 | 3.86 (11.15) .73 | 46.98 (24.64) .06 | -4.86 (107.76) .96 | 51.98 (22.89) .02 | 11.87 (11.82) .32 | --- |
| ab | Covar (Slopes) | 0.19 (0.84) .82 | 0.01 (0.32) .98 | 0.67 (0.92) .46 | 0.62 (0.35) .08 | 2.08 (1.10) .06 | 0.74 (0.88) .40 | 2.53 (0.99) .01 | 3.36 (6.59) .61 | 1.53 (1.26) .22 | 0.29 (0.82) .73 | --- |
| ab | Covar (Residuals) | 1.10 (2.26) .62 | 0.49 (0.92) .59 | 0.43 (2.70) .87 | -0.24 (0.88) .79 | -0.79 (3.33) .81 | 0.35 (2.31) .88 | 0.16 (2.92) .95 | -4.35 (25.36) .86 | -0.85 (3.63) .81 | 1.28 (2.26) .57 | --- |
|  | Correlation of Levels | 0.128 | -0.024 | 0.095 | 0.243 | 0.355 | 0.043 | 0.2092 | -0.0057 | 0.287 | 0.154 | 0.15(0.13) |
|  | Correlation of Slopes | 0.082 | 0.023 | 0.330 | 0.738 | 0.807 | 0.539 | 0.6596 | 0.1830 | 0.998 | 0.263 | 0.46(0.33) |
|  | Correlation of Residuals | 0.031 | 0.045 | 0.013 | -0.018 | -0.019 | 0.011 | 0.0039 | -0.0131 | -0.017 | 0.045 | 0.01(0.03) |
|  | N | 351 | 363 | 363 | 363 | 361 | 360 | 363 | 362 | 363 | 363 | 361.20(3.74) |
|  | occasions | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5.00(0.00) |
|  | parameters | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43.00(0.00) |
|  | LL | -6,950 | -5,630 | -7,127 | -5,944 | -7,323 | -6,716 | -7,529 | -9,769 | -7,620 | -6,837 | -7,144(1,123) |
|  | AIC | 13,985 | 11,346 | 14,341 | 11,973 | 14,732 | 13,519 | 15,143 | 19,624 | 15,326 | 13,760 | 14,375(2,246) |
|  | BIC | 14,151 | 11,513 | 14,508 | 12,141 | 14,900 | 13,686 | 15,311 | 19,792 | 15,493 | 13,928 | 14,542(2,246) |

## block

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 106.27 (2.85) <.01 | 101.24 (4.96) <.01 | 105.94 (7.87) <.01 | 106.16 (6.18) <.01 | 118.65 (8.01) <.01 |
| a | Slope | -2.69 (0.52) <.01 | -3.54 (1.08) <.01 | -4.18 (2.32) .07 | -3.50 (1.55) .02 | -4.26 (2.29) .06 |
| a | Level \* age | -1.55 (0.28) <.01 | -1.55 (0.31) <.01 | -1.48 (0.44) <.01 | -1.56 (0.38) <.01 | -1.37 (0.42) <.01 |
| a | Level \* education | --- | 0.79 (0.53) .14 | 0.57 (0.83) .49 | 0.60 (0.59) .31 | 0.40 (0.80) .62 |
| a | Level \* height | --- | --- | 0.04 (0.31) .90 | 0.11 (0.28) .70 | 0.26 (0.28) .36 |
| a | Level \* smoking | --- | --- | --- | 3.17 (2.80) .26 | 2.45 (3.15) .44 |
| a | Level \* cardio | --- | --- | --- | -7.27 (3.43) .03 | -2.47 (6.31) .69 |
| a | Level \* diabetes | --- | --- | --- | -15.52 (4.46) <.01 | -17.07 (5.65) <.01 |
| a | Slope \* age | -0.05 (0.06) .43 | -0.04 (0.07) .52 | -0.03 (0.11) .77 | -0.07 (0.10) .47 | -0.04 (0.12) .74 |
| a | Slope \* education | --- | 0.13 (0.12) .26 | 0.12 (0.22) .60 | 0.12 (0.16) .47 | 0.10 (0.26) .70 |
| a | Slope \* height | --- | --- | 0.06 (0.06) .32 | 0.03 (0.07) .61 | 0.04 (0.07) .57 |
| a | Slope \* smoking | --- | --- | --- | -0.30 (0.86) .73 | -0.28 (1.18) .81 |
| a | Slope \* cardio | --- | --- | --- | 0.54 (1.27) .67 | -0.28 (1.76) .87 |
| a | Slope \* diabetes | --- | --- | --- | 0.90 (1.38) .51 | 0.66 (2.07) .75 |
| b | Level | 20.58 (0.81) <.01 | 13.79 (1.11) <.01 | 18.36 (2.24) <.01 | 15.52 (1.55) <.01 | 19.28 (2.57) <.01 |
| b | Slope | 0.69 (0.18) <.01 | 1.19 (0.26) <.01 | 0.77 (0.43) .08 | 1.08 (0.45) .02 | 0.75 (0.47) .11 |
| b | Level \* age | -0.18 (0.08) .03 | -0.16 (0.08) .04 | -0.12 (0.16) .46 | -0.14 (0.11) .18 | -0.14 (0.16) .38 |
| b | Level \* education | --- | 1.07 (0.12) <.01 | 0.92 (0.23) <.01 | 0.95 (0.15) <.01 | 0.88 (0.25) <.01 |
| b | Level \* height | --- | --- | -0.01 (0.12) .91 | -0.01 (0.12) .91 | -0.01 (0.11) .95 |
| b | Level \* smoking | --- | --- | --- | 0.53 (0.52) .31 | 1.51 (1.43) .29 |
| b | Level \* cardio | --- | --- | --- | -0.35 (1.10) .75 | -0.31 (2.29) .89 |
| b | Level \* diabetes | --- | --- | --- | -4.18 (1.40) <.01 | -4.30 (2.57) .09 |
| b | Slope \* age | -0.03 (0.02) .11 | -0.03 (0.02) .11 | -0.04 (0.02) .11 | -0.03 (0.03) .31 | -0.04 (0.03) .15 |
| b | Slope \* education | --- | -0.08 (0.03) <.01 | -0.07 (0.05) .16 | -0.08 (0.04) .09 | -0.07 (0.05) .16 |
| b | Slope \* height | --- | --- | -0.01 (0.02) .69 | -0.01 (0.04) .75 | -0.01 (0.02) .65 |
| b | Slope \* smoking | --- | --- | --- | -0.11 (0.22) .60 | -0.10 (0.26) .70 |
| b | Slope \* cardio | --- | --- | --- | -0.21 (0.30) .49 | -0.06 (0.74) .94 |
| b | Slope \* diabetes | --- | --- | --- | 0.64 (0.37) .08 | 0.17 (0.40) .67 |
| a | Var (Level) | 401.24 (54.97) <.01 | 391.35 (54.50) <.01 | 399.19 (81.26) <.01 | 356.80 (57.56) <.01 | 244.86 (61.14) <.01 |
| a | Var (Slope) | 4.04 (1.27) <.01 | 3.70 (1.29) <.01 | 5.75 (2.95) .05 | 6.33 (2.53) .01 | 5.74 (3.33) .08 |
| a | Var (Residual) | 66.09 (4.08) <.01 | 66.42 (4.24) <.01 | 62.39 (7.96) <.01 | 63.28 (5.98) <.01 | 62.42 (8.62) <.01 |
| a | Covar (Level, Slope) | -2.19 (7.18) .76 | -2.15 (6.91) .76 | -11.30 (14.39) .43 | -5.62 (9.33) .55 | -6.92 (13.45) .61 |
| b | Var (Level) | 66.81 (5.53) <.01 | 53.87 (4.96) <.01 | 51.77 (9.18) <.01 | 47.66 (6.39) <.01 | 46.41 (9.32) <.01 |
| b | Var (Slope) | 0.33 (0.13) .01 | 0.26 (0.13) .04 | 0.14 (0.21) .50 | 0.85 (0.46) .06 | 0.12 (0.24) .60 |
| b | Var (Residual) | 21.66 (0.86) <.01 | 21.65 (0.87) <.01 | 19.84 (1.49) <.01 | 19.99 (1.01) <.01 | 19.85 (1.68) <.01 |
| b | Covar (Level, Slope) | -3.03 (0.89) <.01 | -2.08 (0.84) .01 | -1.28 (1.44) .37 | -1.64 (1.47) .26 | -0.97 (1.51) .52 |
| ab | Covar (Levels) | 40.22 (14.45) <.01 | 31.67 (13.06) .01 | 37.67 (21.52) .08 | 16.75 (14.11) .23 | 15.04 (18.23) .41 |
| ab | Covar (Slopes) | 0.35 (0.32) .27 | 0.45 (0.30) .14 | 0.03 (0.58) .96 | 0.19 (0.84) .82 | 0.01 (0.59) .99 |
| ab | Covar (Residuals) | -0.69 (1.93) .72 | -0.67 (1.95) .73 | -2.26 (2.72) .41 | 1.10 (2.26) .62 | -2.56 (2.94) .38 |
|  | Correlation of Levels | 0.246 | 0.218 | 0.262 | 0.128 | 0.1410 |
|  | Correlation of Slopes | 0.302 | 0.455 | 0.033 | 0.082 | 0.0071 |
|  | Correlation of Residuals | -0.018 | -0.018 | -0.064 | 0.031 | -0.0727 |
|  | N | 563 | 563 | 150 | 351 | 150 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -8,545 | -8,499 | -3,572 | -6,950 | -3,542 |
|  | AIC | 17,132 | 17,048 | 7,203 | 13,985 | 7,173 |
|  | BIC | 17,223 | 17,157 | 7,290 | 14,151 | 7,309 |

## bnt

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 106.41 (2.87) <.01 | 101.66 (4.97) <.01 | 106.27 (8.15) <.01 | 106.39 (5.93) <.01 | 119.70 (8.32) <.01 |
| a | Slope | -2.72 (0.58) <.01 | -3.59 (1.10) <.01 | -4.11 (2.76) .14 | -3.49 (1.60) .03 | -4.72 (2.95) .11 |
| a | Level \* age | -1.53 (0.29) <.01 | -1.53 (0.30) <.01 | -1.47 (0.46) <.01 | -1.56 (0.37) <.01 | -1.37 (0.46) <.01 |
| a | Level \* education | --- | 0.76 (0.53) .16 | 0.53 (0.83) .52 | 0.59 (0.59) .32 | 0.32 (0.76) .68 |
| a | Level \* height | --- | --- | 0.01 (0.32) .96 | 0.10 (0.28) .73 | 0.22 (0.29) .44 |
| a | Level \* smoking | --- | --- | --- | 3.23 (2.55) .20 | 2.04 (4.07) .62 |
| a | Level \* cardio | --- | --- | --- | -7.41 (3.49) .03 | -3.33 (6.90) .63 |
| a | Level \* diabetes | --- | --- | --- | -15.34 (4.73) <.01 | -17.06 (6.27) .01 |
| a | Slope \* age | -0.05 (0.06) .44 | -0.04 (0.07) .50 | -0.04 (0.14) .76 | -0.07 (0.10) .47 | -0.04 (0.14) .75 |
| a | Slope \* education | --- | 0.14 (0.12) .24 | 0.14 (0.24) .57 | 0.12 (0.17) .48 | 0.16 (0.26) .54 |
| a | Slope \* height | --- | --- | 0.07 (0.06) .24 | 0.04 (0.07) .56 | 0.06 (0.07) .37 |
| a | Slope \* smoking | --- | --- | --- | -0.30 (0.84) .72 | -0.06 (1.26) .96 |
| a | Slope \* cardio | --- | --- | --- | 0.59 (1.25) .64 | 0.67 (1.97) .73 |
| a | Slope \* diabetes | --- | --- | --- | 0.76 (1.47) .60 | 0.38 (2.92) .90 |
| b | Level | 11.87 (0.25) <.01 | 9.81 (0.29) <.01 | 10.34 (0.64) <.01 | 10.33 (0.42) <.01 | 10.80 (0.64) <.01 |
| b | Slope | -0.01 (0.05) .81 | 0.04 (0.07) .59 | 0.01 (0.12) .94 | 0.06 (0.12) .65 | -0.06 (0.17) .73 |
| b | Level \* age | -0.06 (0.02) .01 | -0.06 (0.02) .01 | -0.05 (0.05) .35 | -0.05 (0.03) .05 | -0.06 (0.06) .30 |
| b | Level \* education | --- | 0.32 (0.03) <.01 | 0.30 (0.06) <.01 | 0.28 (0.04) <.01 | 0.27 (0.06) <.01 |
| b | Level \* height | --- | --- | 0.01 (0.03) .80 | -0.00 (0.03) .89 | 0.00 (0.03) .88 |
| b | Level \* smoking | --- | --- | --- | 0.05 (0.17) .79 | 0.45 (0.22) .05 |
| b | Level \* cardio | --- | --- | --- | 0.03 (0.25) .90 | -0.82 (0.52) .12 |
| b | Level \* diabetes | --- | --- | --- | -0.82 (0.39) .04 | -1.62 (0.51) <.01 |
| b | Slope \* age | -0.01 (0.00) .14 | -0.01 (0.00) .12 | -0.01 (0.01) .46 | -0.01 (0.01) .12 | -0.01 (0.01) .56 |
| b | Slope \* education | --- | -0.01 (0.01) .37 | -0.01 (0.02) .60 | -0.00 (0.01) .95 | -0.00 (0.02) .84 |
| b | Slope \* height | --- | --- | -0.00 (0.01) .93 | 0.00 (0.01) .79 | 0.00 (0.01) .97 |
| b | Slope \* smoking | --- | --- | --- | 0.01 (0.08) .86 | 0.01 (0.11) .92 |
| b | Slope \* cardio | --- | --- | --- | -0.00 (0.10) .96 | 0.21 (0.19) .28 |
| b | Slope \* diabetes | --- | --- | --- | -0.01 (0.10) .90 | -0.04 (0.13) .76 |
| a | Var (Level) | 399.01 (53.86) <.01 | 389.19 (53.12) <.01 | 403.23 (81.20) <.01 | 359.46 (59.48) <.01 | 251.91 (64.67) <.01 |
| a | Var (Slope) | 4.29 (1.58) .01 | 3.97 (1.56) .01 | 6.93 (3.49) .05 | 6.53 (2.71) .02 | 7.39 (4.26) .08 |
| a | Var (Residual) | 65.86 (4.16) <.01 | 66.05 (4.27) <.01 | 61.21 (8.17) <.01 | 63.06 (5.97) <.01 | 61.22 (8.54) <.01 |
| a | Covar (Level, Slope) | -1.67 (7.42) .82 | -1.75 (7.09) .80 | -13.50 (16.39) .41 | -6.26 (11.02) .57 | -11.28 (14.42) .43 |
| b | Var (Level) | 5.60 (0.51) <.01 | 4.36 (0.42) <.01 | 3.50 (0.89) <.01 | 3.71 (0.60) <.01 | 2.71 (0.84) <.01 |
| b | Var (Slope) | 0.01 (0.01) .51 | 0.01 (0.01) .47 | 0.02 (0.02) .33 | 0.01 (0.03) .67 | 0.03 (0.03) .24 |
| b | Var (Residual) | 1.93 (0.08) <.01 | 1.93 (0.08) <.01 | 1.78 (0.14) <.01 | 1.89 (0.10) <.01 | 1.75 (0.15) <.01 |
| b | Covar (Level, Slope) | 0.02 (0.08) .77 | 0.05 (0.07) .49 | 0.20 (0.14) .15 | 0.07 (0.12) .57 | 0.24 (0.15) .11 |
| ab | Covar (Levels) | 8.03 (4.95) .10 | 5.34 (4.51) .24 | 9.22 (7.16) .20 | -0.88 (4.93) .86 | 1.28 (4.92) .79 |
| ab | Covar (Slopes) | 0.11 (0.11) .33 | 0.11 (0.11) .30 | 0.29 (0.23) .22 | 0.01 (0.32) .98 | 0.33 (0.30) .28 |
| ab | Covar (Residuals) | 0.24 (0.79) .76 | 0.23 (0.80) .77 | -0.11 (1.18) .93 | 0.49 (0.92) .59 | 0.02 (1.28) .99 |
|  | Correlation of Levels | 0.170 | 0.13 | 0.25 | -0.024 | 0.0491 |
|  | Correlation of Slopes | 0.539 | 0.56 | 0.69 | 0.023 | 0.6641 |
|  | Correlation of Residuals | 0.021 | 0.02 | -0.01 | 0.045 | 0.0021 |
|  | N | 594 | 594 | 150 | 363 | 150 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -6,739 | -6,682 | -2,825 | -5,630 | -2,787 |
|  | AIC | 13,520 | 13,413 | 5,709 | 11,346 | 5,665 |
|  | BIC | 13,612 | 13,523 | 5,796 | 11,513 | 5,800 |

## categories

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 106.67 (2.88) <.01 | 102.15 (4.93) <.01 | 106.24 (7.82) <.01 | 106.77 (5.99) <.01 | 118.86 (8.04) <.01 |
| a | Slope | -2.71 (0.54) <.01 | -3.75 (1.06) <.01 | -3.92 (2.31) .09 | -3.71 (1.65) .02 | -4.19 (2.62) .11 |
| a | Level \* age | -1.58 (0.29) <.01 | -1.58 (0.30) <.01 | -1.49 (0.47) <.01 | -1.62 (0.41) <.01 | -1.35 (0.47) <.01 |
| a | Level \* education | --- | 0.72 (0.52) .17 | 0.57 (0.83) .49 | 0.56 (0.56) .31 | 0.36 (0.75) .63 |
| a | Level \* height | --- | --- | 0.05 (0.33) .87 | 0.11 (0.28) .70 | 0.27 (0.32) .40 |
| a | Level \* smoking | --- | --- | --- | 3.45 (2.69) .20 | 2.33 (3.98) .56 |
| a | Level \* cardio | --- | --- | --- | -7.50 (3.33) .02 | -2.24 (6.78) .74 |
| a | Level \* diabetes | --- | --- | --- | -15.44 (4.57) <.01 | -17.24 (5.30) <.01 |
| a | Slope \* age | -0.06 (0.06) .30 | -0.06 (0.07) .40 | -0.06 (0.12) .60 | -0.08 (0.12) .47 | -0.07 (0.13) .57 |
| a | Slope \* education | --- | 0.16 (0.12) .17 | 0.14 (0.23) .55 | 0.14 (0.16) .37 | 0.14 (0.28) .62 |
| a | Slope \* height | --- | --- | 0.06 (0.07) .38 | 0.03 (0.08) .67 | 0.04 (0.07) .58 |
| a | Slope \* smoking | --- | --- | --- | -0.29 (0.86) .74 | -0.21 (1.27) .87 |
| a | Slope \* cardio | --- | --- | --- | 0.58 (1.23) .64 | 0.11 (2.48) .96 |
| a | Slope \* diabetes | --- | --- | --- | 0.93 (1.39) .51 | 0.94 (2.07) .65 |
| b | Level | 40.51 (0.74) <.01 | 35.58 (1.05) <.01 | 37.63 (2.57) <.01 | 37.31 (1.36) <.01 | 38.66 (3.01) <.01 |
| b | Slope | -0.22 (0.19) .24 | -0.51 (0.29) .08 | -0.77 (0.69) .27 | -0.52 (0.40) .19 | -0.66 (0.74) .37 |
| b | Level \* age | -0.28 (0.08) <.01 | -0.26 (0.08) <.01 | -0.32 (0.19) .08 | -0.28 (0.10) <.01 | -0.34 (0.19) .07 |
| b | Level \* education | --- | 0.78 (0.10) <.01 | 0.76 (0.26) <.01 | 0.68 (0.14) <.01 | 0.72 (0.29) .01 |
| b | Level \* height | --- | --- | -0.11 (0.14) .43 | -0.10 (0.10) .29 | -0.10 (0.15) .50 |
| b | Level \* smoking | --- | --- | --- | 0.42 (0.61) .48 | 0.75 (1.34) .58 |
| b | Level \* cardio | --- | --- | --- | 0.18 (1.25) .88 | 1.14 (3.15) .72 |
| b | Level \* diabetes | --- | --- | --- | -3.79 (1.26) <.01 | -5.15 (2.38) .03 |
| b | Slope \* age | -0.04 (0.02) .04 | -0.04 (0.02) .05 | -0.03 (0.04) .52 | -0.04 (0.02) .06 | -0.03 (0.05) .55 |
| b | Slope \* education | --- | 0.04 (0.03) .16 | 0.07 (0.06) .24 | 0.06 (0.04) .15 | 0.07 (0.07) .26 |
| b | Slope \* height | --- | --- | 0.00 (0.03) .85 | 0.02 (0.03) .53 | 0.01 (0.03) .82 |
| b | Slope \* smoking | --- | --- | --- | -0.05 (0.24) .82 | 0.08 (0.36) .82 |
| b | Slope \* cardio | --- | --- | --- | 0.06 (0.29) .83 | 0.00 (0.91) .99 |
| b | Slope \* diabetes | --- | --- | --- | -0.00 (0.34) .99 | 0.10 (0.67) .88 |
| a | Var (Level) | 394.17 (54.59) <.01 | 384.52 (53.78) <.01 | 398.88 (79.69) <.01 | 352.09 (56.29) <.01 | 245.52 (65.56) <.01 |
| a | Var (Slope) | 4.17 (1.35) <.01 | 3.81 (1.33) <.01 | 6.10 (3.03) .04 | 6.55 (2.58) .01 | 6.04 (3.46) .08 |
| a | Var (Residual) | 66.10 (4.16) <.01 | 66.37 (4.25) <.01 | 61.91 (7.49) <.01 | 63.22 (5.82) <.01 | 61.75 (7.66) <.01 |
| a | Covar (Level, Slope) | 0.18 (7.12) .98 | 0.02 (6.88) .99 | -11.90 (15.88) .45 | -4.08 (9.45) .67 | -7.17 (15.08) .64 |
| b | Var (Level) | 60.58 (5.14) <.01 | 53.19 (4.72) <.01 | 57.82 (12.34) <.01 | 41.22 (5.34) <.01 | 52.96 (13.52) <.01 |
| b | Var (Slope) | 0.76 (0.17) <.01 | 0.75 (0.16) <.01 | 0.89 (0.36) .01 | 0.64 (0.32) .05 | 0.88 (0.44) .04 |
| b | Var (Residual) | 17.93 (0.79) <.01 | 17.90 (0.79) <.01 | 17.36 (1.25) <.01 | 17.33 (1.00) <.01 | 17.30 (1.56) <.01 |
| b | Covar (Level, Slope) | 0.28 (0.78) .72 | -0.06 (0.77) .94 | 0.54 (1.74) .76 | 1.49 (1.13) .19 | 0.48 (2.00) .81 |
| ab | Covar (Levels) | 31.50 (14.64) .03 | 24.85 (13.80) .07 | 16.88 (20.94) .42 | 11.43 (13.72) .40 | -0.01 (15.77) .99 |
| ab | Covar (Slopes) | 0.68 (0.35) .05 | 0.64 (0.35) .06 | 0.84 (0.94) .38 | 0.67 (0.92) .46 | 0.97 (1.18) .41 |
| ab | Covar (Residuals) | 0.32 (1.88) .86 | 0.22 (1.90) .91 | 2.00 (3.51) .57 | 0.43 (2.70) .87 | 1.42 (3.78) .71 |
|  | Correlation of Levels | 0.2038 | 0.1737 | 0.111 | 0.095 | -9.6e-05 |
|  | Correlation of Slopes | 0.3828 | 0.3790 | 0.360 | 0.330 | 4.2e-01 |
|  | Correlation of Residuals | 0.0093 | 0.0065 | 0.061 | 0.013 | 4.3e-02 |
|  | N | 593 | 593 | 150 | 363 | 150 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -8,805 | -8,767 | -3,582 | -7,127 | -3,552 |
|  | AIC | 17,652 | 17,584 | 7,223 | 14,341 | 7,194 |
|  | BIC | 17,744 | 17,693 | 7,310 | 14,508 | 7,329 |

## digit\_tot

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 105.69 (2.87) <.01 | 100.50 (4.88) <.01 | 105.59 (7.91) <.01 | 105.69 (5.90) <.01 | 118.18 (7.92) <.01 |
| a | Slope | -2.49 (0.58) <.01 | -3.36 (1.07) <.01 | -3.43 (2.18) .12 | -3.13 (1.49) .04 | -3.60 (2.40) .13 |
| a | Level \* age | -1.50 (0.28) <.01 | -1.49 (0.29) <.01 | -1.52 (0.47) <.01 | -1.50 (0.37) <.01 | -1.39 (0.47) <.01 |
| a | Level \* education | --- | 0.82 (0.52) .11 | 0.65 (0.82) .43 | 0.61 (0.56) .27 | 0.46 (0.75) .54 |
| a | Level \* height | --- | --- | 0.02 (0.34) .94 | 0.16 (0.28) .56 | 0.24 (0.30) .42 |
| a | Level \* smoking | --- | --- | --- | 3.34 (2.67) .21 | 2.59 (3.85) .50 |
| a | Level \* cardio | --- | --- | --- | -7.43 (3.29) .02 | -2.78 (8.20) .73 |
| a | Level \* diabetes | --- | --- | --- | -15.46 (4.29) <.01 | -16.88 (5.37) <.01 |
| a | Slope \* age | -0.06 (0.06) .38 | -0.06 (0.07) .38 | -0.04 (0.12) .72 | -0.10 (0.10) .29 | -0.05 (0.13) .72 |
| a | Slope \* education | --- | 0.13 (0.12) .25 | 0.08 (0.23) .74 | 0.10 (0.16) .52 | 0.06 (0.27) .83 |
| a | Slope \* height | --- | --- | 0.07 (0.07) .29 | 0.01 (0.06) .83 | 0.05 (0.07) .49 |
| a | Slope \* smoking | --- | --- | --- | -0.34 (0.86) .69 | -0.37 (1.36) .78 |
| a | Slope \* cardio | --- | --- | --- | 0.55 (1.25) .66 | -0.02 (2.35) .99 |
| a | Slope \* diabetes | --- | --- | --- | 0.79 (1.26) .53 | 0.58 (2.22) .79 |
| b | Level | 13.51 (0.30) <.01 | 11.19 (0.40) <.01 | 13.29 (0.84) <.01 | 12.21 (0.60) <.01 | 13.43 (1.00) <.01 |
| b | Slope | 0.26 (0.07) <.01 | 0.36 (0.10) <.01 | 0.26 (0.17) .13 | 0.30 (0.15) .05 | 0.30 (0.20) .15 |
| b | Level \* age | -0.04 (0.03) .20 | -0.03 (0.03) .27 | -0.06 (0.06) .33 | -0.03 (0.04) .44 | -0.07 (0.07) .30 |
| b | Level \* education | --- | 0.37 (0.04) <.01 | 0.30 (0.08) <.01 | 0.29 (0.06) <.01 | 0.29 (0.09) <.01 |
| b | Level \* height | --- | --- | 0.03 (0.05) .57 | 0.07 (0.05) .10 | 0.02 (0.05) .60 |
| b | Level \* smoking | --- | --- | --- | 0.24 (0.33) .47 | 0.42 (0.48) .38 |
| b | Level \* cardio | --- | --- | --- | -0.46 (0.50) .36 | -0.36 (1.09) .74 |
| b | Level \* diabetes | --- | --- | --- | -1.37 (0.54) .01 | -1.63 (0.75) .03 |
| b | Slope \* age | -0.01 (0.01) .27 | -0.01 (0.01) .26 | -0.02 (0.01) .21 | -0.01 (0.01) .24 | -0.02 (0.01) .21 |
| b | Slope \* education | --- | -0.02 (0.01) .14 | -0.02 (0.02) .39 | -0.01 (0.01) .35 | -0.02 (0.02) .36 |
| b | Slope \* height | --- | --- | -0.01 (0.01) .13 | -0.03 (0.01) .02 | -0.01 (0.01) .15 |
| b | Slope \* smoking | --- | --- | --- | -0.01 (0.09) .95 | -0.02 (0.14) .87 |
| b | Slope \* cardio | --- | --- | --- | 0.00 (0.11) .98 | -0.11 (0.31) .72 |
| b | Slope \* diabetes | --- | --- | --- | 0.16 (0.14) .24 | 0.06 (0.15) .68 |
| a | Var (Level) | 403.83 (53.82) <.01 | 388.50 (52.32) <.01 | 411.02 (79.83) <.01 | 356.87 (56.35) <.01 | 253.89 (62.80) <.01 |
| a | Var (Slope) | 4.17 (1.37) <.01 | 3.76 (1.33) <.01 | 6.42 (3.16) .04 | 6.29 (2.39) .01 | 6.19 (4.00) .12 |
| a | Var (Residual) | 66.21 (4.06) <.01 | 66.72 (4.17) <.01 | 61.56 (7.67) <.01 | 63.62 (5.72) <.01 | 61.67 (8.65) <.01 |
| a | Covar (Level, Slope) | -2.19 (7.25) .76 | -1.05 (6.83) .88 | -16.08 (15.36) .29 | -5.29 (9.19) .56 | -10.41 (16.70) .53 |
| b | Var (Level) | 10.55 (0.80) <.01 | 8.97 (0.72) <.01 | 6.41 (1.28) <.01 | 7.27 (0.89) <.01 | 5.85 (1.40) <.01 |
| b | Var (Slope) | 0.10 (0.03) <.01 | 0.09 (0.03) <.01 | 0.05 (0.03) .12 | 0.11 (0.06) .06 | 0.04 (0.03) .19 |
| b | Var (Residual) | 2.70 (0.12) <.01 | 2.70 (0.12) <.01 | 2.41 (0.17) <.01 | 2.66 (0.15) <.01 | 2.41 (0.19) <.01 |
| b | Covar (Level, Slope) | -0.34 (0.14) .02 | -0.27 (0.13) .04 | 0.02 (0.15) .90 | -0.08 (0.19) .66 | 0.03 (0.16) .83 |
| ab | Covar (Levels) | 20.30 (6.32) <.01 | 17.04 (5.76) <.01 | 14.14 (7.54) .06 | 12.35 (6.17) .04 | 9.19 (7.20) .20 |
| ab | Covar (Slopes) | 0.30 (0.18) .10 | 0.32 (0.18) .08 | 0.36 (0.23) .12 | 0.62 (0.35) .08 | 0.35 (0.23) .14 |
| ab | Covar (Residuals) | 0.63 (0.70) .37 | 0.61 (0.71) .39 | 0.85 (0.99) .39 | -0.24 (0.88) .79 | 0.81 (1.05) .44 |
|  | Correlation of Levels | 0.311 | 0.289 | 0.275 | 0.243 | 0.239 |
|  | Correlation of Slopes | 0.473 | 0.548 | 0.652 | 0.738 | 0.672 |
|  | Correlation of Residuals | 0.047 | 0.045 | 0.069 | -0.018 | 0.066 |
|  | N | 595 | 595 | 150 | 363 | 150 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -7,136 | -7,095 | -2,911 | -5,944 | -2,879 |
|  | AIC | 14,314 | 14,240 | 5,879 | 11,973 | 5,848 |
|  | BIC | 14,407 | 14,349 | 5,967 | 12,141 | 5,984 |

## fas

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 105.17 (2.89) <.01 | 100.95 (4.90) <.01 | 105.65 (7.87) <.01 | 106.22 (5.87) <.01 | 117.84 (8.51) <.01 |
| a | Slope | -2.61 (0.61) <.01 | -3.66 (1.09) <.01 | -3.27 (2.28) .15 | -3.50 (1.58) .03 | -3.40 (2.41) .16 |
| a | Level \* age | -1.45 (0.28) <.01 | -1.43 (0.29) <.01 | -1.44 (0.44) <.01 | -1.53 (0.36) <.01 | -1.33 (0.50) .01 |
| a | Level \* education | --- | 0.66 (0.51) .19 | 0.46 (0.82) .57 | 0.54 (0.54) .32 | 0.36 (0.78) .65 |
| a | Level \* height | --- | --- | 0.07 (0.31) .83 | 0.13 (0.28) .64 | 0.27 (0.31) .38 |
| a | Level \* smoking | --- | --- | --- | 3.13 (2.55) .22 | 2.69 (4.03) .50 |
| a | Level \* cardio | --- | --- | --- | -6.71 (3.15) .03 | -2.00 (7.74) .80 |
| a | Level \* diabetes | --- | --- | --- | -14.88 (4.34) <.01 | -16.84 (5.48) <.01 |
| a | Slope \* age | -0.06 (0.06) .36 | -0.06 (0.07) .40 | -0.06 (0.12) .63 | -0.07 (0.10) .50 | -0.07 (0.15) .66 |
| a | Slope \* education | --- | 0.16 (0.11) .15 | 0.10 (0.23) .67 | 0.12 (0.15) .43 | 0.07 (0.26) .80 |
| a | Slope \* height | --- | --- | 0.07 (0.07) .31 | 0.04 (0.07) .56 | 0.05 (0.07) .51 |
| a | Slope \* smoking | --- | --- | --- | -0.29 (0.84) .73 | -0.33 (1.47) .82 |
| a | Slope \* cardio | --- | --- | --- | 0.49 (1.19) .68 | -0.22 (2.16) .92 |
| a | Slope \* diabetes | --- | --- | --- | 0.79 (1.28) .54 | 0.74 (2.16) .73 |
| b | Level | 34.15 (1.09) <.01 | 24.04 (1.45) <.01 | 29.56 (3.38) <.01 | 28.01 (2.12) <.01 | 30.55 (3.80) <.01 |
| b | Slope | 0.55 (0.21) .01 | 0.68 (0.32) .03 | 0.50 (0.64) .43 | 0.42 (0.54) .44 | 0.52 (0.77) .50 |
| b | Level \* age | -0.11 (0.12) .36 | -0.07 (0.10) .50 | -0.31 (0.25) .22 | -0.22 (0.14) .11 | -0.34 (0.27) .22 |
| b | Level \* education | --- | 1.57 (0.15) <.01 | 1.37 (0.35) <.01 | 1.29 (0.21) <.01 | 1.28 (0.36) <.01 |
| b | Level \* height | --- | --- | -0.11 (0.17) .52 | -0.17 (0.16) .28 | -0.11 (0.18) .53 |
| b | Level \* smoking | --- | --- | --- | 1.07 (0.98) .28 | 2.91 (1.48) .05 |
| b | Level \* cardio | --- | --- | --- | 0.37 (1.48) .80 | -1.94 (3.96) .62 |
| b | Level \* diabetes | --- | --- | --- | -4.50 (1.85) .01 | -7.07 (2.91) .01 |
| b | Slope \* age | -0.03 (0.02) .10 | -0.04 (0.02) .10 | -0.06 (0.04) .09 | -0.03 (0.03) .37 | -0.06 (0.04) .13 |
| b | Slope \* education | --- | -0.02 (0.04) .58 | 0.01 (0.06) .83 | 0.05 (0.06) .40 | 0.02 (0.07) .77 |
| b | Slope \* height | --- | --- | 0.00 (0.02) .86 | 0.06 (0.04) .15 | 0.00 (0.02) .92 |
| b | Slope \* smoking | --- | --- | --- | 0.01 (0.32) .97 | -0.08 (0.41) .85 |
| b | Slope \* cardio | --- | --- | --- | -0.31 (0.27) .26 | 0.07 (0.83) .93 |
| b | Slope \* diabetes | --- | --- | --- | -0.20 (0.40) .62 | 0.52 (0.59) .38 |
| a | Var (Level) | 397.99 (52.45) <.01 | 386.40 (51.29) <.01 | 420.10 (81.32) <.01 | 363.39 (56.24) <.01 | 260.48 (67.42) <.01 |
| a | Var (Slope) | 4.53 (1.42) <.01 | 4.23 (1.39) <.01 | 7.09 (3.44) .04 | 6.77 (2.54) .01 | 6.82 (3.75) .07 |
| a | Var (Residual) | 65.74 (4.17) <.01 | 66.08 (4.31) <.01 | 60.73 (7.26) <.01 | 63.09 (6.01) <.01 | 60.63 (7.96) <.01 |
| a | Covar (Level, Slope) | -1.90 (7.11) .79 | -1.63 (6.85) .81 | -19.02 (15.38) .22 | -7.74 (9.63) .42 | -12.55 (15.09) .40 |
| b | Var (Level) | 143.35 (11.46) <.01 | 114.58 (9.08) <.01 | 114.25 (22.04) <.01 | 100.29 (13.00) <.01 | 99.52 (22.76) <.01 |
| b | Var (Slope) | 0.32 (0.23) .17 | 0.31 (0.23) .18 | 0.17 (0.31) .58 | 0.98 (0.64) .12 | 0.24 (0.44) .59 |
| b | Var (Residual) | 28.49 (1.26) <.01 | 28.46 (1.25) <.01 | 25.82 (1.84) <.01 | 27.81 (1.57) <.01 | 25.43 (1.93) <.01 |
| b | Covar (Level, Slope) | 0.02 (1.25) .99 | 0.42 (1.10) .70 | 2.25 (2.33) .33 | 0.96 (2.51) .70 | 2.73 (3.09) .38 |
| ab | Covar (Levels) | 81.01 (21.90) <.01 | 69.28 (19.85) <.01 | 81.43 (32.40) .01 | 67.83 (23.06) <.01 | 42.83 (25.82) .10 |
| ab | Covar (Slopes) | 0.95 (0.36) .01 | 1.02 (0.37) .01 | 0.82 (0.56) .14 | 2.08 (1.10) .06 | 0.68 (0.71) .34 |
| ab | Covar (Residuals) | -0.05 (2.47) .98 | -0.14 (2.49) .96 | -2.73 (2.91) .35 | -0.79 (3.33) .81 | -2.74 (3.31) .41 |
|  | Correlation of Levels | 0.3391 | 0.3292 | 0.372 | 0.355 | 0.27 |
|  | Correlation of Slopes | 0.7909 | 0.8905 | 0.740 | 0.807 | 0.53 |
|  | Correlation of Residuals | -0.0012 | -0.0032 | -0.069 | -0.019 | -0.07 |
|  | N | 572 | 572 | 150 | 361 | 150 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -9,032 | -8,976 | -3,709 | -7,323 | -3,677 |
|  | AIC | 18,106 | 18,001 | 7,476 | 14,732 | 7,443 |
|  | BIC | 18,197 | 18,110 | 7,564 | 14,900 | 7,579 |

## information

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | full |
| a | Level | 105.97 (2.95) <.01 | 102.00 (5.12) <.01 | 105.78 (8.48) <.01 | 117.95 (8.60) <.01 |
| a | Slope | -2.37 (0.58) <.01 | -3.52 (1.14) <.01 | -3.41 (2.40) .15 | -3.38 (2.64) .20 |
| a | Level \* age | -1.45 (0.29) <.01 | -1.46 (0.30) <.01 | -1.49 (0.49) <.01 | -1.35 (0.51) .01 |
| a | Level \* education | --- | 0.64 (0.54) .24 | 0.56 (0.88) .52 | 0.40 (0.84) .63 |
| a | Level \* height | --- | --- | 0.01 (0.36) .97 | 0.24 (0.31) .45 |
| a | Level \* smoking | --- | --- | --- | 2.42 (4.09) .56 |
| a | Level \* cardio | --- | --- | --- | -2.10 (8.15) .80 |
| a | Level \* diabetes | --- | --- | --- | -16.72 (6.07) .01 |
| a | Slope \* age | -0.07 (0.06) .25 | -0.07 (0.07) .31 | -0.06 (0.14) .65 | -0.07 (0.16) .67 |
| a | Slope \* education | --- | 0.17 (0.12) .15 | 0.11 (0.25) .65 | 0.08 (0.31) .80 |
| a | Slope \* height | --- | --- | 0.07 (0.07) .28 | 0.05 (0.07) .46 |
| a | Slope \* smoking | --- | --- | --- | -0.32 (1.21) .79 |
| a | Slope \* cardio | --- | --- | --- | -0.20 (3.00) .95 |
| a | Slope \* diabetes | --- | --- | --- | 0.52 (2.14) .81 |
| b | Level | 19.59 (0.58) <.01 | 15.70 (0.72) <.01 | 13.05 (1.58) <.01 | 13.33 (2.33) <.01 |
| b | Slope | -0.46 (0.14) <.01 | -0.60 (0.22) .01 | 0.05 (0.49) .92 | 0.29 (0.64) .65 |
| b | Level \* age | -0.04 (0.06) .45 | -0.04 (0.05) .47 | -0.13 (0.12) .26 | -0.13 (0.14) .35 |
| b | Level \* education | --- | 0.65 (0.08) <.01 | 0.87 (0.19) <.01 | 0.88 (0.25) <.01 |
| b | Level \* height | --- | --- | -0.01 (0.07) .82 | -0.01 (0.08) .93 |
| b | Level \* smoking | --- | --- | --- | 0.27 (0.74) .71 |
| b | Level \* cardio | --- | --- | --- | 0.73 (2.19) .74 |
| b | Level \* diabetes | --- | --- | --- | -2.63 (1.56) .09 |
| b | Slope \* age | 0.00 (0.01) .70 | 0.01 (0.01) .64 | 0.00 (0.03) .87 | 0.00 (0.04) .88 |
| b | Slope \* education | --- | 0.02 (0.02) .48 | -0.02 (0.05) .71 | -0.03 (0.06) .59 |
| b | Slope \* height | --- | --- | 0.01 (0.02) .73 | 0.00 (0.03) .85 |
| b | Slope \* smoking | --- | --- | --- | -0.01 (0.39) .99 |
| b | Slope \* cardio | --- | --- | --- | -0.26 (0.37) .49 |
| b | Slope \* diabetes | --- | --- | --- | -0.22 (0.48) .65 |
| a | Var (Level) | 400.27 (55.44) <.01 | 390.91 (54.26) <.01 | 411.77 (88.38) <.01 | 259.33 (73.21) <.01 |
| a | Var (Slope) | 4.59 (1.65) <.01 | 4.16 (1.64) .01 | 6.72 (3.27) .04 | 6.64 (3.93) .09 |
| a | Var (Residual) | 65.85 (4.65) <.01 | 66.10 (4.83) <.01 | 60.11 (7.79) <.01 | 60.03 (8.85) <.01 |
| a | Covar (Level, Slope) | -2.74 (7.67) .72 | -2.68 (7.24) .71 | -16.32 (16.69) .33 | -11.98 (15.40) .44 |
| b | Var (Level) | 26.49 (2.94) <.01 | 21.63 (2.38) <.01 | 12.20 (3.49) <.01 | 11.12 (4.21) .01 |
| b | Var (Slope) | 0.24 (0.10) .01 | 0.23 (0.09) .01 | 0.12 (0.27) .66 | 0.10 (0.29) .74 |
| b | Var (Residual) | 8.56 (0.38) <.01 | 8.56 (0.38) <.01 | 7.38 (0.69) <.01 | 7.37 (0.77) <.01 |
| b | Covar (Level, Slope) | -0.79 (0.44) .07 | -0.82 (0.39) .04 | 0.68 (0.85) .43 | 0.57 (1.08) .59 |
| ab | Covar (Levels) | 8.35 (9.39) .37 | 5.15 (9.45) .59 | 15.27 (13.40) .25 | 6.87 (12.15) .57 |
| ab | Covar (Slopes) | -0.27 (0.36) .44 | -0.28 (0.36) .43 | -0.48 (0.71) .49 | -0.42 (0.94) .66 |
| ab | Covar (Residuals) | -0.29 (1.20) .81 | -0.30 (1.22) .81 | -0.33 (1.97) .87 | -0.24 (2.53) .92 |
|  | Correlation of Levels | 0.081 | 0.056 | 0.216 | 0.128 |
|  | Correlation of Slopes | -0.259 | -0.287 | -0.545 | -0.531 |
|  | Correlation of Residuals | -0.012 | -0.013 | -0.016 | -0.011 |
|  | N | 524 | 524 | 130 | 130 |
|  | occasions | 7 | 7 | 7 | 7 |
|  | parameters | 21 | 25 | 29 | 45 |
|  | LL | -7,096 | -7,044 | -2,632 | -2,603 |
|  | AIC | 14,234 | 14,138 | 5,323 | 5,296 |
|  | BIC | 14,324 | 14,244 | 5,406 | 5,425 |

## logic\_tot

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 106.10 (2.92) <.01 | 101.40 (4.99) <.01 | 106.11 (8.80) <.01 | 106.16 (6.01) <.01 | 118.54 (8.96) <.01 |
| a | Slope | -2.60 (0.58) <.01 | -3.44 (1.10) <.01 | -3.74 (2.37) .12 | -3.29 (1.62) .04 | -3.87 (2.63) .14 |
| a | Level \* age | -1.52 (0.29) <.01 | -1.52 (0.30) <.01 | -1.52 (0.47) <.01 | -1.55 (0.38) <.01 | -1.38 (0.47) <.01 |
| a | Level \* education | --- | 0.74 (0.52) .16 | 0.62 (0.92) .50 | 0.60 (0.57) .30 | 0.43 (0.82) .60 |
| a | Level \* height | --- | --- | 0.02 (0.32) .94 | 0.11 (0.29) .70 | 0.24 (0.30) .42 |
| a | Level \* smoking | --- | --- | --- | 3.24 (2.50) .20 | 2.37 (3.48) .50 |
| a | Level \* cardio | --- | --- | --- | -7.30 (3.18) .02 | -2.27 (6.84) .74 |
| a | Level \* diabetes | --- | --- | --- | -15.51 (4.53) <.01 | -17.06 (5.88) <.01 |
| a | Slope \* age | -0.05 (0.06) .40 | -0.05 (0.07) .48 | -0.04 (0.12) .73 | -0.09 (0.10) .38 | -0.05 (0.13) .68 |
| a | Slope \* education | --- | 0.13 (0.12) .27 | 0.11 (0.24) .65 | 0.10 (0.18) .56 | 0.09 (0.28) .74 |
| a | Slope \* height | --- | --- | 0.08 (0.08) .29 | 0.03 (0.07) .71 | 0.06 (0.08) .46 |
| a | Slope \* smoking | --- | --- | --- | -0.31 (0.88) .72 | -0.25 (1.20) .83 |
| a | Slope \* cardio | --- | --- | --- | 0.54 (1.26) .67 | 0.07 (1.96) .97 |
| a | Slope \* diabetes | --- | --- | --- | 0.96 (1.42) .50 | 0.69 (2.20) .75 |
| b | Level | 21.61 (0.57) <.01 | 16.53 (0.80) <.01 | 18.15 (1.84) <.01 | 17.83 (1.14) <.01 | 18.23 (2.23) <.01 |
| b | Slope | 0.13 (0.14) .37 | 0.05 (0.23) .84 | -0.03 (0.35) .93 | -0.07 (0.37) .84 | 0.07 (0.50) .89 |
| b | Level \* age | -0.22 (0.06) <.01 | -0.21 (0.06) <.01 | -0.11 (0.12) .38 | -0.25 (0.08) <.01 | -0.12 (0.13) .34 |
| b | Level \* education | --- | 0.79 (0.08) <.01 | 0.73 (0.20) <.01 | 0.68 (0.11) <.01 | 0.71 (0.22) <.01 |
| b | Level \* height | --- | --- | 0.08 (0.10) .39 | 0.05 (0.09) .57 | 0.08 (0.10) .41 |
| b | Level \* smoking | --- | --- | --- | 0.62 (0.48) .19 | 0.62 (1.13) .58 |
| b | Level \* cardio | --- | --- | --- | -1.07 (0.98) .27 | 0.35 (2.84) .90 |
| b | Level \* diabetes | --- | --- | --- | 0.16 (1.12) .89 | -1.10 (2.05) .59 |
| b | Slope \* age | -0.01 (0.01) .31 | -0.01 (0.02) .36 | -0.02 (0.03) .57 | -0.01 (0.02) .80 | -0.01 (0.03) .67 |
| b | Slope \* education | --- | 0.01 (0.02) .58 | 0.00 (0.04) .89 | 0.04 (0.04) .25 | 0.01 (0.04) .84 |
| b | Slope \* height | --- | --- | -0.01 (0.02) .75 | -0.01 (0.02) .79 | -0.00 (0.02) .93 |
| b | Slope \* smoking | --- | --- | --- | -0.16 (0.24) .49 | -0.02 (0.31) .94 |
| b | Slope \* cardio | --- | --- | --- | 0.43 (0.28) .12 | 0.27 (0.77) .73 |
| b | Slope \* diabetes | --- | --- | --- | -0.27 (0.32) .40 | -0.07 (0.47) .88 |
| a | Var (Level) | 400.77 (55.16) <.01 | 391.57 (54.48) <.01 | 403.41 (82.38) <.01 | 357.50 (57.41) <.01 | 249.90 (63.51) <.01 |
| a | Var (Slope) | 4.14 (1.35) <.01 | 3.86 (1.35) <.01 | 6.24 (2.99) .04 | 6.55 (2.59) .01 | 6.10 (3.35) .07 |
| a | Var (Residual) | 65.91 (4.26) <.01 | 66.11 (4.38) <.01 | 61.51 (8.41) <.01 | 62.95 (5.72) <.01 | 61.50 (9.30) <.01 |
| a | Covar (Level, Slope) | -2.08 (7.67) .79 | -2.14 (7.33) .77 | -13.65 (15.01) .36 | -5.62 (9.66) .56 | -8.88 (13.44) .51 |
| b | Var (Level) | 30.70 (3.69) <.01 | 23.32 (3.05) <.01 | 22.65 (5.61) <.01 | 22.81 (4.18) <.01 | 21.93 (5.71) <.01 |
| b | Var (Slope) | 0.17 (0.09) .06 | 0.17 (0.09) .07 | 0.12 (0.11) .26 | 0.28 (0.36) .43 | 0.09 (0.13) .48 |
| b | Var (Residual) | 15.44 (0.72) <.01 | 15.43 (0.72) <.01 | 14.59 (1.24) <.01 | 15.43 (0.85) <.01 | 14.57 (1.34) <.01 |
| b | Covar (Level, Slope) | -0.01 (0.65) .99 | -0.02 (0.58) .97 | 0.64 (0.92) .49 | -0.13 (1.00) .90 | 0.67 (0.95) .48 |
| ab | Covar (Levels) | 15.37 (10.40) .14 | 8.65 (9.34) .35 | 10.80 (13.95) .44 | 3.86 (11.15) .73 | 6.59 (12.11) .59 |
| ab | Covar (Slopes) | 0.17 (0.29) .55 | 0.16 (0.28) .58 | 0.25 (0.58) .67 | 0.74 (0.88) .40 | 0.30 (0.63) .63 |
| ab | Covar (Residuals) | 1.70 (1.78) .34 | 1.68 (1.80) .35 | 0.82 (2.54) .75 | 0.35 (2.31) .88 | 0.47 (2.82) .87 |
|  | Correlation of Levels | 0.139 | 0.090 | 0.113 | 0.043 | 0.089 |
|  | Correlation of Slopes | 0.204 | 0.195 | 0.284 | 0.539 | 0.405 |
|  | Correlation of Residuals | 0.053 | 0.052 | 0.027 | 0.011 | 0.016 |
|  | N | 554 | 554 | 150 | 360 | 150 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -8,126 | -8,065 | -3,451 | -6,716 | -3,422 |
|  | AIC | 16,293 | 16,181 | 6,960 | 13,519 | 6,935 |
|  | BIC | 16,384 | 16,289 | 7,047 | 13,686 | 7,070 |

## mmse

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | full |
| a | Level | 107.70 (3.41) <.01 | 107.67 (5.57) <.01 | 101.63 (11.25) <.01 | 107.27 (14.30) <.01 |
| a | Slope | -2.27 (0.73) <.01 | -2.22 (1.14) .05 | 0.06 (2.91) .98 | -1.37 (7.00) .84 |
| a | Level \* age | -1.05 (0.37) <.01 | -1.05 (0.38) <.01 | -0.43 (0.48) .37 | -0.48 (0.56) .39 |
| a | Level \* education | --- | 0.01 (0.61) .99 | 0.70 (0.83) .40 | 0.70 (1.00) .48 |
| a | Level \* height | --- | --- | 0.13 (0.42) .75 | -0.02 (0.49) .97 |
| a | Level \* smoking | --- | --- | --- | -1.24 (7.55) .87 |
| a | Level \* cardio | --- | --- | --- | -4.62 (15.53) .77 |
| a | Level \* diabetes | --- | --- | --- | -5.41 (9.03) .55 |
| a | Slope \* age | -0.12 (0.09) .18 | -0.12 (0.09) .18 | -0.14 (0.16) .36 | -0.11 (0.22) .62 |
| a | Slope \* education | --- | -0.01 (0.15) .97 | -0.27 (0.19) .15 | -0.29 (0.37) .43 |
| a | Slope \* height | --- | --- | -0.00 (0.13) .98 | 0.10 (0.21) .65 |
| a | Slope \* smoking | --- | --- | --- | 0.37 (3.12) .91 |
| a | Slope \* cardio | --- | --- | --- | 1.73 (4.58) .71 |
| a | Slope \* diabetes | --- | --- | --- | 0.82 (3.58) .82 |
| b | Level | 26.19 (0.19) <.01 | 26.22 (0.19) <.01 | 26.45 (0.64) <.01 | 26.90 (1.11) <.01 |
| b | Slope | 0.09 (0.05) .06 | 0.10 (0.06) .12 | 0.01 (0.21) .97 | -0.05 (0.34) .89 |
| b | Level \* age | -0.00 (0.02) .96 | -0.00 (0.02) .94 | 0.00 (0.04) .93 | -0.00 (0.04) .92 |
| b | Level \* education | --- | -0.00 (0.01) .72 | 0.06 (0.05) .19 | 0.06 (0.06) .31 |
| b | Level \* height | --- | --- | 0.00 (0.03) .94 | 0.00 (0.04) .99 |
| b | Level \* smoking | --- | --- | --- | -0.30 (0.44) .49 |
| b | Level \* cardio | --- | --- | --- | 0.14 (0.66) .84 |
| b | Level \* diabetes | --- | --- | --- | -0.02 (0.46) .96 |
| b | Slope \* age | -0.01 (0.00) .01 | -0.01 (0.00) .01 | -0.00 (0.01) .73 | -0.00 (0.02) .85 |
| b | Slope \* education | --- | 0.00 (0.00) .95 | 0.00 (0.01) .88 | 0.00 (0.02) .91 |
| b | Slope \* height | --- | --- | -0.00 (0.01) .89 | 0.00 (0.02) .99 |
| b | Slope \* smoking | --- | --- | --- | 0.06 (0.14) .68 |
| b | Slope \* cardio | --- | --- | --- | -0.03 (0.31) .92 |
| b | Slope \* diabetes | --- | --- | --- | 0.04 (0.15) .80 |
| a | Var (Level) | 346.18 (71.14) <.01 | 344.95 (75.81) <.01 | 216.47 (89.94) .02 | 214.50 (129.55) .10 |
| a | Var (Slope) | 2.20 (1.37) .11 | 2.14 (1.43) .14 | 1.76 (3.77) .64 | 0.78 (5.83) .89 |
| a | Var (Residual) | 79.59 (7.08) <.01 | 79.70 (7.19) <.01 | 73.08 (15.30) <.01 | 75.51 (24.81) <.01 |
| a | Covar (Level, Slope) | 6.45 (11.63) .58 | 6.62 (12.38) .59 | 0.74 (17.23) .97 | -2.20 (20.57) .92 |
| b | Var (Level) | 1.79 (0.22) <.01 | 1.76 (0.22) <.01 | 0.30 (0.26) .26 | 0.27 (0.36) .46 |
| b | Var (Slope) | 0.00 (0.01) .51 | 0.00 (0.01) .57 | 0.01 (0.02) .72 | 0.01 (0.02) .76 |
| b | Var (Residual) | 0.98 (0.04) <.01 | 0.98 (0.04) <.01 | 0.67 (0.07) <.01 | 0.66 (0.08) <.01 |
| b | Covar (Level, Slope) | -0.01 (0.04) .77 | -0.01 (0.04) .85 | 0.04 (0.07) .57 | 0.04 (0.07) .60 |
| ab | Covar (Levels) | 10.51 (5.53) .06 | 10.38 (5.74) .07 | 2.34 (3.90) .55 | 1.71 (5.92) .77 |
| ab | Covar (Slopes) | -0.00 (0.12) .98 | -0.00 (0.12) .99 | 0.01 (0.18) .95 | 0.03 (0.30) .93 |
| ab | Covar (Residuals) | 0.08 (0.69) .91 | 0.07 (0.69) .92 | 0.21 (1.05) .84 | 0.24 (1.42) .86 |
|  | Correlation of Levels | 0.4217 | 0.4212 | 0.29 | 0.224 |
|  | Correlation of Slopes | -0.0213 | -0.0250 | 0.11 | 0.410 |
|  | Correlation of Residuals | 0.0089 | 0.0084 | 0.03 | 0.034 |
|  | N | 383 | 383 | 72 | 72 |
|  | occasions | 8 | 8 | 8 | 8 |
|  | parameters | 21 | 25 | 29 | 45 |
|  | LL | -3,874 | -3,872 | -1,317 | -1,312 |
|  | AIC | 7,790 | 7,793 | 2,691 | 2,713 |
|  | BIC | 7,872 | 7,892 | 2,757 | 2,816 |

## symbol

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 105.42 (2.79) <.01 | 100.41 (4.75) <.01 | 105.24 (7.89) <.01 | 106.58 (5.78) <.01 | 117.55 (8.18) <.01 |
| a | Slope | -2.38 (0.55) <.01 | -3.31 (1.03) <.01 | -3.18 (2.50) .20 | -3.54 (1.51) .02 | -3.26 (3.00) .28 |
| a | Level \* age | -1.60 (0.28) <.01 | -1.59 (0.29) <.01 | -1.44 (0.46) <.01 | -1.58 (0.37) <.01 | -1.32 (0.46) <.01 |
| a | Level \* education | --- | 0.79 (0.51) .12 | 0.57 (0.84) .50 | 0.51 (0.55) .35 | 0.42 (0.79) .59 |
| a | Level \* height | --- | --- | 0.06 (0.31) .86 | 0.10 (0.29) .74 | 0.26 (0.31) .41 |
| a | Level \* smoking | --- | --- | --- | 3.27 (2.47) .19 | 2.50 (3.90) .52 |
| a | Level \* cardio | --- | --- | --- | -6.84 (3.38) .04 | -2.32 (6.69) .73 |
| a | Level \* diabetes | --- | --- | --- | -16.04 (4.40) <.01 | -17.00 (5.69) <.01 |
| a | Slope \* age | -0.06 (0.06) .30 | -0.06 (0.06) .36 | -0.06 (0.13) .64 | -0.09 (0.10) .37 | -0.07 (0.15) .64 |
| a | Slope \* education | --- | 0.14 (0.11) .21 | 0.07 (0.24) .78 | 0.14 (0.15) .36 | 0.05 (0.25) .85 |
| a | Slope \* height | --- | --- | 0.07 (0.07) .32 | 0.02 (0.07) .72 | 0.05 (0.08) .53 |
| a | Slope \* smoking | --- | --- | --- | -0.30 (0.84) .72 | -0.29 (1.51) .85 |
| a | Slope \* cardio | --- | --- | --- | 0.37 (1.18) .75 | -0.14 (1.99) .94 |
| a | Slope \* diabetes | --- | --- | --- | 0.96 (1.33) .47 | 0.66 (2.99) .83 |
| b | Level | 45.31 (1.24) <.01 | 32.63 (1.65) <.01 | 39.73 (2.94) <.01 | 35.89 (2.59) <.01 | 40.95 (3.38) <.01 |
| b | Slope | 0.55 (0.23) .02 | 1.03 (0.45) .02 | 0.26 (0.60) .67 | 1.23 (0.67) .06 | 0.45 (0.60) .45 |
| b | Level \* age | -0.61 (0.13) <.01 | -0.57 (0.11) <.01 | -0.37 (0.25) .14 | -0.38 (0.15) .01 | -0.41 (0.26) .11 |
| b | Level \* education | --- | 2.01 (0.18) <.01 | 1.86 (0.34) <.01 | 1.56 (0.23) <.01 | 1.77 (0.35) <.01 |
| b | Level \* height | --- | --- | 0.08 (0.18) .66 | 0.13 (0.19) .49 | 0.05 (0.21) .81 |
| b | Level \* smoking | --- | --- | --- | 1.07 (1.06) .31 | 2.35 (2.36) .32 |
| b | Level \* cardio | --- | --- | --- | -2.54 (2.06) .22 | -5.17 (6.87) .45 |
| b | Level \* diabetes | --- | --- | --- | -4.65 (2.01) .02 | -6.69 (3.00) .03 |
| b | Slope \* age | -0.05 (0.02) .05 | -0.05 (0.02) .04 | -0.05 (0.03) .10 | -0.10 (0.04) .01 | -0.05 (0.04) .17 |
| b | Slope \* education | --- | -0.08 (0.05) .11 | -0.04 (0.07) .54 | -0.01 (0.06) .90 | -0.05 (0.07) .47 |
| b | Slope \* height | --- | --- | 0.00 (0.03) .90 | -0.04 (0.04) .40 | 0.01 (0.03) .82 |
| b | Slope \* smoking | --- | --- | --- | 0.16 (0.35) .64 | 0.03 (0.43) .95 |
| b | Slope \* cardio | --- | --- | --- | 0.03 (0.49) .94 | 0.11 (0.77) .89 |
| b | Slope \* diabetes | --- | --- | --- | -0.75 (0.51) .14 | -0.27 (0.70) .70 |
| a | Var (Level) | 399.98 (52.42) <.01 | 388.49 (50.69) <.01 | 407.19 (79.59) <.01 | 352.22 (56.81) <.01 | 255.60 (65.97) <.01 |
| a | Var (Slope) | 4.23 (1.34) <.01 | 3.87 (1.31) <.01 | 6.55 (3.02) .03 | 6.20 (2.36) .01 | 6.57 (3.21) .04 |
| a | Var (Residual) | 65.92 (4.31) <.01 | 66.28 (4.42) <.01 | 61.18 (7.29) <.01 | 63.67 (5.88) <.01 | 60.78 (7.59) <.01 |
| a | Covar (Level, Slope) | -1.92 (7.09) .79 | -1.82 (6.66) .78 | -15.10 (15.12) .32 | -3.75 (8.80) .67 | -11.07 (13.96) .43 |
| b | Var (Level) | 191.63 (14.35) <.01 | 144.74 (10.92) <.01 | 129.73 (20.44) <.01 | 143.21 (15.94) <.01 | 115.14 (19.09) <.01 |
| b | Var (Slope) | 1.50 (0.37) <.01 | 1.43 (0.35) <.01 | 0.28 (0.36) .44 | 2.37 (0.75) <.01 | 0.31 (0.45) .49 |
| b | Var (Residual) | 30.73 (1.27) <.01 | 30.66 (1.26) <.01 | 28.20 (1.83) <.01 | 28.13 (1.51) <.01 | 27.98 (1.92) <.01 |
| b | Covar (Level, Slope) | -6.75 (2.46) .01 | -4.85 (1.96) .01 | -1.65 (2.63) .53 | -6.32 (2.91) .03 | -2.14 (2.72) .43 |
| ab | Covar (Levels) | 89.01 (24.45) <.01 | 69.62 (20.65) <.01 | 63.36 (31.63) .04 | 46.98 (24.64) .06 | 32.05 (31.37) .31 |
| ab | Covar (Slopes) | 1.33 (0.62) .03 | 1.43 (0.64) .03 | 1.07 (0.76) .16 | 2.53 (0.99) .01 | 1.12 (0.93) .23 |
| ab | Covar (Residuals) | 0.40 (2.28) .86 | 0.52 (2.31) .82 | -3.45 (3.84) .37 | 0.16 (2.92) .95 | -2.77 (4.02) .49 |
|  | Correlation of Levels | 0.3215 | 0.294 | 0.276 | 0.2092 | 0.187 |
|  | Correlation of Slopes | 0.5288 | 0.606 | 0.791 | 0.6596 | 0.783 |
|  | Correlation of Residuals | 0.0089 | 0.012 | -0.083 | 0.0039 | -0.067 |
|  | N | 592 | 592 | 150 | 363 | 150 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -9,382 | -9,307 | -3,735 | -7,529 | -3,699 |
|  | AIC | 18,807 | 18,664 | 7,527 | 15,143 | 7,487 |
|  | BIC | 18,899 | 18,774 | 7,615 | 15,311 | 7,623 |

## trailsb

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 106.20 (2.94) <.01 | 101.55 (5.22) <.01 | 105.46 (8.29) <.01 | 106.84 (5.94) <.01 | 117.96 (7.86) <.01 |
| a | Slope | -2.65 (0.55) <.01 | -3.51 (1.14) <.01 | -3.57 (2.46) .15 | -3.56 (1.59) .03 | -3.76 (2.65) .16 |
| a | Level \* age | -1.59 (0.28) <.01 | -1.58 (0.30) <.01 | -1.49 (0.51) <.01 | -1.57 (0.38) <.01 | -1.37 (0.52) .01 |
| a | Level \* education | --- | 0.73 (0.54) .18 | 0.58 (0.86) .50 | 0.52 (0.57) .36 | 0.41 (0.74) .58 |
| a | Level \* height | --- | --- | 0.01 (0.34) .97 | 0.08 (0.29) .77 | 0.23 (0.32) .46 |
| a | Level \* smoking | --- | --- | --- | 3.06 (2.76) .27 | 2.49 (4.03) .54 |
| a | Level \* cardio | --- | --- | --- | -7.24 (3.63) .05 | -2.77 (6.81) .68 |
| a | Level \* diabetes | --- | --- | --- | -15.47 (4.53) <.01 | -16.97 (5.36) <.01 |
| a | Slope \* age | -0.05 (0.06) .40 | -0.05 (0.07) .51 | -0.05 (0.15) .74 | -0.08 (0.11) .46 | -0.06 (0.17) .75 |
| a | Slope \* education | --- | 0.13 (0.12) .26 | 0.10 (0.24) .68 | 0.13 (0.16) .41 | 0.08 (0.26) .75 |
| a | Slope \* height | --- | --- | 0.07 (0.08) .38 | 0.04 (0.07) .58 | 0.05 (0.09) .57 |
| a | Slope \* smoking | --- | --- | --- | -0.26 (0.85) .76 | -0.26 (1.35) .85 |
| a | Slope \* cardio | --- | --- | --- | 0.63 (1.26) .62 | -0.17 (1.98) .93 |
| a | Slope \* diabetes | --- | --- | --- | 0.72 (1.37) .60 | 0.55 (2.49) .82 |
| b | Level | 124.95 (7.19) <.01 | 172.26 (7.61) <.01 | 170.19 (16.75) <.01 | 154.13 (11.83) <.01 | 171.52 (18.38) <.01 |
| b | Slope | 1.08 (1.33) .42 | 1.12 (2.12) .60 | 3.31 (4.16) .43 | 1.03 (3.99) .80 | 3.26 (5.09) .52 |
| b | Level \* age | 2.56 (0.64) <.01 | 2.40 (0.58) <.01 | 1.59 (1.32) .23 | 2.65 (0.81) <.01 | 2.02 (1.41) .15 |
| b | Level \* education | --- | -7.38 (0.92) <.01 | -7.52 (1.93) <.01 | -6.58 (1.17) <.01 | -7.11 (2.02) <.01 |
| b | Level \* height | --- | --- | -0.02 (0.80) .98 | 0.40 (1.00) .69 | 0.28 (0.89) .75 |
| b | Level \* smoking | --- | --- | --- | -5.13 (5.39) .34 | -11.94 (7.18) .10 |
| b | Level \* cardio | --- | --- | --- | 10.50 (7.63) .17 | 29.78 (23.00) .20 |
| b | Level \* diabetes | --- | --- | --- | 28.85 (11.31) .01 | 33.72 (17.71) .06 |
| b | Slope \* age | 0.26 (0.13) .05 | 0.26 (0.14) .07 | 0.23 (0.28) .41 | 0.18 (0.26) .48 | 0.21 (0.32) .50 |
| b | Slope \* education | --- | -0.01 (0.23) .98 | -0.24 (0.48) .62 | 0.05 (0.36) .89 | -0.25 (0.52) .63 |
| b | Slope \* height | --- | --- | 0.02 (0.18) .92 | -0.10 (0.41) .80 | -0.01 (0.22) .96 |
| b | Slope \* smoking | --- | --- | --- | -0.26 (2.20) .91 | -0.36 (2.74) .90 |
| b | Slope \* cardio | --- | --- | --- | 1.44 (2.15) .50 | -2.14 (10.27) .83 |
| b | Slope \* diabetes | --- | --- | --- | 0.13 (3.87) .97 | 2.45 (4.62) .60 |
| a | Var (Level) | 403.61 (54.40) <.01 | 393.10 (53.47) <.01 | 409.68 (80.42) <.01 | 359.61 (57.41) <.01 | 254.46 (66.11) <.01 |
| a | Var (Slope) | 4.10 (1.38) <.01 | 3.80 (1.41) .01 | 6.46 (3.50) .06 | 6.33 (2.62) .02 | 6.32 (3.95) .11 |
| a | Var (Residual) | 66.13 (4.16) <.01 | 66.31 (4.29) <.01 | 61.44 (7.66) <.01 | 63.43 (6.14) <.01 | 61.51 (8.18) <.01 |
| a | Covar (Level, Slope) | -1.69 (7.15) .81 | -1.81 (6.89) .79 | -14.83 (15.94) .35 | -6.11 (9.12) .50 | -10.23 (15.18) .50 |
| b | Var (Level) | 3328.63 (470.64) <.01 | 2688.99 (379.25) <.01 | 2682.84 (739.15) <.01 | 2050.71 (468.10) <.01 | 2236.44 (720.17) <.01 |
| b | Var (Slope) | 5.55 (9.96) .58 | 5.73 (10.42) .58 | 3.67 (16.34) .82 | 53.20 (35.71) .14 | 3.16 (21.11) .88 |
| b | Var (Residual) | 1753.94 (49.31) <.01 | 1756.91 (48.65) <.01 | 1493.26 (66.71) <.01 | 1746.80 (81.31) <.01 | 1485.67 (70.95) <.01 |
| b | Covar (Level, Slope) | 48.87 (71.47) .49 | 46.65 (66.39) .48 | 61.82 (121.67) .61 | -16.15 (117.13) .89 | 52.25 (144.50) .72 |
| ab | Covar (Levels) | -283.26 (135.15) .04 | -214.80 (119.21) .07 | -219.55 (185.69) .24 | -4.86 (107.76) .96 | -143.57 (166.87) .39 |
| ab | Covar (Slopes) | -1.65 (2.93) .57 | -1.43 (2.86) .62 | -1.11 (4.85) .82 | 3.36 (6.59) .61 | -1.69 (6.11) .78 |
| ab | Covar (Residuals) | -2.90 (18.86) .88 | -3.00 (18.93) .87 | -4.08 (26.83) .88 | -4.35 (25.36) .86 | -1.24 (32.01) .97 |
|  | Correlation of Levels | -0.2444 | -0.2089 | -0.209 | -0.0057 | -0.1903 |
|  | Correlation of Slopes | -0.3451 | -0.3056 | -0.228 | 0.1830 | -0.3781 |
|  | Correlation of Residuals | -0.0085 | -0.0088 | -0.013 | -0.0131 | -0.0041 |
|  | N | 580 | 580 | 150 | 362 | 150 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -12,416 | -12,370 | -4,940 | -9,769 | -4,901 |
|  | AIC | 24,873 | 24,791 | 9,938 | 19,624 | 9,892 |
|  | BIC | 24,965 | 24,900 | 10,025 | 19,792 | 10,028 |

## waisvocab

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 106.17 (2.94) <.01 | 101.11 (5.02) <.01 | 105.71 (8.18) <.01 | 105.74 (5.92) <.01 | 118.03 (8.55) <.01 |
| a | Slope | -2.52 (0.59) <.01 | -3.41 (1.16) <.01 | -3.42 (2.58) .18 | -3.26 (1.61) .04 | -3.45 (2.63) .19 |
| a | Level \* age | -1.51 (0.29) <.01 | -1.49 (0.30) <.01 | -1.47 (0.46) <.01 | -1.46 (0.37) <.01 | -1.34 (0.49) .01 |
| a | Level \* education | --- | 0.80 (0.53) .13 | 0.59 (0.85) .49 | 0.58 (0.57) .31 | 0.41 (0.76) .59 |
| a | Level \* height | --- | --- | 0.05 (0.32) .87 | 0.14 (0.28) .62 | 0.26 (0.30) .39 |
| a | Level \* smoking | --- | --- | --- | 3.62 (2.79) .20 | 2.66 (4.33) .54 |
| a | Level \* cardio | --- | --- | --- | -7.84 (3.21) .01 | -2.34 (7.58) .76 |
| a | Level \* diabetes | --- | --- | --- | -14.37 (4.48) <.01 | -16.76 (5.55) <.01 |
| a | Slope \* age | -0.06 (0.07) .40 | -0.06 (0.07) .43 | -0.07 (0.12) .58 | -0.10 (0.11) .34 | -0.08 (0.14) .58 |
| a | Slope \* education | --- | 0.14 (0.12) .27 | 0.10 (0.25) .70 | 0.12 (0.17) .48 | 0.07 (0.28) .79 |
| a | Slope \* height | --- | --- | 0.07 (0.07) .31 | 0.03 (0.06) .65 | 0.04 (0.07) .53 |
| a | Slope \* smoking | --- | --- | --- | -0.34 (0.85) .69 | -0.34 (1.30) .79 |
| a | Slope \* cardio | --- | --- | --- | 0.64 (1.28) .62 | -0.27 (2.10) .90 |
| a | Slope \* diabetes | --- | --- | --- | 0.73 (1.36) .59 | 0.55 (2.35) .81 |
| b | Level | 44.77 (1.11) <.01 | 32.82 (1.28) <.01 | 34.44 (2.73) <.01 | 36.07 (1.88) <.01 | 35.85 (3.21) <.01 |
| b | Slope | 0.05 (0.22) .81 | -0.22 (0.36) .54 | 0.09 (0.65) .89 | -0.74 (0.55) .18 | 0.12 (0.77) .87 |
| b | Level \* age | 0.04 (0.11) .73 | 0.08 (0.09) .42 | -0.11 (0.24) .65 | 0.04 (0.14) .76 | -0.12 (0.28) .65 |
| b | Level \* education | --- | 1.90 (0.14) <.01 | 1.86 (0.30) <.01 | 1.65 (0.20) <.01 | 1.85 (0.32) <.01 |
| b | Level \* height | --- | --- | -0.07 (0.14) .60 | -0.00 (0.15) .99 | -0.04 (0.16) .82 |
| b | Level \* smoking | --- | --- | --- | 0.47 (1.02) .64 | 1.06 (1.26) .40 |
| b | Level \* cardio | --- | --- | --- | -0.50 (1.33) .70 | 3.59 (4.37) .41 |
| b | Level \* diabetes | --- | --- | --- | -2.91 (1.75) .10 | -4.64 (2.50) .06 |
| b | Slope \* age | -0.05 (0.02) .02 | -0.05 (0.02) .02 | -0.04 (0.04) .28 | -0.03 (0.04) .43 | -0.05 (0.05) .32 |
| b | Slope \* education | --- | 0.04 (0.04) .34 | 0.02 (0.07) .75 | 0.06 (0.06) .32 | 0.00 (0.07) .97 |
| b | Slope \* height | --- | --- | 0.01 (0.02) .56 | 0.00 (0.04) .98 | 0.01 (0.03) .77 |
| b | Slope \* smoking | --- | --- | --- | 0.12 (0.34) .72 | -0.01 (0.39) .98 |
| b | Slope \* cardio | --- | --- | --- | -0.15 (0.46) .74 | -0.65 (0.93) .48 |
| b | Slope \* diabetes | --- | --- | --- | 0.24 (0.47) .60 | -0.15 (0.57) .79 |
| a | Var (Level) | 410.08 (55.32) <.01 | 397.49 (54.13) <.01 | 408.65 (81.52) <.01 | 361.28 (58.52) <.01 | 253.46 (65.27) <.01 |
| a | Var (Slope) | 4.26 (1.42) <.01 | 3.93 (1.44) .01 | 6.72 (3.55) .06 | 6.75 (2.56) .01 | 6.71 (4.26) .12 |
| a | Var (Residual) | 65.76 (4.25) <.01 | 66.05 (4.37) <.01 | 60.78 (6.96) <.01 | 62.77 (5.87) <.01 | 60.72 (7.52) <.01 |
| a | Covar (Level, Slope) | -3.56 (7.70) .64 | -3.35 (7.39) .65 | -15.40 (16.72) .36 | -6.53 (9.85) .51 | -10.67 (16.78) .52 |
| b | Var (Level) | 141.33 (13.01) <.01 | 97.66 (9.11) <.01 | 85.71 (16.79) <.01 | 90.89 (13.53) <.01 | 79.05 (17.19) <.01 |
| b | Var (Slope) | 0.35 (0.31) .25 | 0.31 (0.30) .30 | 0.28 (0.39) .47 | 0.35 (0.66) .60 | 0.26 (0.42) .54 |
| b | Var (Residual) | 39.33 (1.38) <.01 | 39.17 (1.37) <.01 | 29.85 (1.93) <.01 | 40.92 (1.84) <.01 | 29.57 (2.04) <.01 |
| b | Covar (Level, Slope) | -2.41 (1.90) .20 | -2.51 (1.54) .10 | -2.04 (2.23) .36 | -1.83 (2.65) .49 | -1.82 (2.44) .46 |
| ab | Covar (Levels) | 74.69 (21.34) <.01 | 55.35 (19.11) <.01 | 60.86 (26.39) .02 | 51.98 (22.89) .02 | 34.14 (21.83) .12 |
| ab | Covar (Slopes) | 0.92 (0.47) .05 | 0.81 (0.46) .07 | 1.19 (0.81) .14 | 1.53 (1.26) .22 | 1.15 (0.94) .22 |
| ab | Covar (Residuals) | -0.65 (2.96) .83 | -0.64 (3.01) .83 | 1.82 (3.87) .64 | -0.85 (3.63) .81 | 2.53 (4.31) .56 |
|  | Correlation of Levels | 0.310 | 0.281 | 0.325 | 0.287 | 0.24 |
|  | Correlation of Slopes | 0.748 | 0.738 | 0.863 | 0.998 | 0.87 |
|  | Correlation of Residuals | -0.013 | -0.013 | 0.043 | -0.017 | 0.06 |
|  | N | 594 | 594 | 150 | 363 | 150 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -9,465 | -9,358 | -3,714 | -7,620 | -3,682 |
|  | AIC | 18,972 | 18,766 | 7,487 | 15,326 | 7,455 |
|  | BIC | 19,064 | 18,876 | 7,574 | 15,493 | 7,590 |

## word\_im

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

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| a | Level | 106.29 (5.88) <.01 |
| a | Slope | -3.41 (1.58) .03 |
| a | Level \* age | -1.55 (0.38) <.01 |
| a | Level \* education | 0.60 (0.56) .29 |
| a | Level \* height | 0.16 (0.28) .56 |
| a | Level \* smoking | 2.72 (2.55) .29 |
| a | Level \* cardio | -6.92 (3.22) .03 |
| a | Level \* diabetes | -15.59 (4.34) <.01 |
| a | Slope \* age | -0.10 (0.10) .34 |
| a | Slope \* education | 0.12 (0.16) .46 |
| a | Slope \* height | 0.03 (0.08) .71 |
| a | Slope \* smoking | -0.33 (0.85) .70 |
| a | Slope \* cardio | 0.59 (1.33) .66 |
| a | Slope \* diabetes | 0.74 (1.35) .58 |
| b | Level | 34.19 (0.97) <.01 |
| b | Slope | 0.18 (0.32) .58 |
| b | Level \* age | -0.16 (0.07) .03 |
| b | Level \* education | 0.08 (0.10) .41 |
| b | Level \* height | 0.07 (0.08) .40 |
| b | Level \* smoking | -1.12 (0.43) .01 |
| b | Level \* cardio | 0.68 (1.19) .57 |
| b | Level \* diabetes | -1.20 (1.01) .23 |
| b | Slope \* age | -0.07 (0.02) <.01 |
| b | Slope \* education | 0.03 (0.03) .31 |
| b | Slope \* height | -0.04 (0.02) .10 |
| b | Slope \* smoking | 0.04 (0.20) .84 |
| b | Slope \* cardio | -0.04 (0.26) .88 |
| b | Slope \* diabetes | -0.26 (0.27) .34 |
| a | Var (Level) | 354.92 (58.41) <.01 |
| a | Var (Slope) | 6.46 (2.51) .01 |
| a | Var (Residual) | 63.32 (5.87) <.01 |
| a | Covar (Level, Slope) | -3.92 (9.43) .68 |
| b | Var (Level) | 16.65 (2.91) <.01 |
| b | Var (Slope) | 0.18 (0.30) .55 |
| b | Var (Residual) | 12.84 (0.63) <.01 |
| b | Covar (Level, Slope) | 0.61 (0.90) .50 |
| ab | Covar (Levels) | 11.87 (11.82) .32 |
| ab | Covar (Slopes) | 0.29 (0.82) .73 |
| ab | Covar (Residuals) | 1.28 (2.26) .57 |
|  | Correlation of Levels | 0.154 |
|  | Correlation of Slopes | 0.263 |
|  | Correlation of Residuals | 0.045 |
|  | N | 363 |
|  | occasions | 5 |
|  | parameters | 43 |
|  | LL | -6,837 |
|  | AIC | 13,760 |
|  | BIC | 13,928 |

## Summary

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

Computed correlations:

label

process\_b

a

ae

aeh

aehplus

full

Correlation of Levels

block

0.25

0.22

0.26

0.13

0.14

Correlation of Levels

bnt

0.17

0.13

0.25

-0.02

0.05

Correlation of Levels

categories

0.20

0.17

0.11

0.09

-0.00

Correlation of Levels

digit\_tot

0.31

0.29

0.28

0.24

0.24

Correlation of Levels

fas

0.34

0.33

0.37

0.36

0.27

Correlation of Levels

information

0.08

0.06

0.22

.

0.13

Correlation of Levels

logic\_tot

0.14

0.09

0.11

0.04

0.09

Correlation of Levels

mmse

0.42

0.42

0.29

.

0.22

Correlation of Levels

symbol

0.32

0.29

0.28

0.21

0.19

Correlation of Levels

trailsb

-0.24

-0.21

-0.21

-0.01

-0.19

Correlation of Levels

waisvocab

0.31

0.28

0.33

0.29

0.24

Correlation of Levels

word\_im

.

.

.

0.15

.

label

process\_b

a

ae

aeh

aehplus

full

Correlation of Slopes

block

0.30

0.46

0.03

0.08

0.01

Correlation of Slopes

bnt

0.54

0.56

0.69

0.02

0.66

Correlation of Slopes

categories

0.38

0.38

0.36

0.33

0.42

Correlation of Slopes

digit\_tot

0.47

0.55

0.65

0.74

0.67

Correlation of Slopes

fas

0.79

0.89

0.74

0.81

0.53

Correlation of Slopes

information

-0.26

-0.29

-0.54

.

-0.53

Correlation of Slopes

logic\_tot

0.20

0.19

0.28

0.54

0.40

Correlation of Slopes

mmse

-0.02

-0.02

0.11

.

0.41

Correlation of Slopes

symbol

0.53

0.61

0.79

0.66

0.78

Correlation of Slopes

trailsb

-0.35

-0.31

-0.23

0.18

-0.38

Correlation of Slopes

waisvocab

0.75

0.74

0.86

1.00

0.87

Correlation of Slopes

word\_im

.

.

.

0.26

.

label

process\_b

a

ae

aeh

aehplus

full

Correlation of Residuals

block

-0.02

-0.02

-0.06

0.03

-0.07

Correlation of Residuals

bnt

0.02

0.02

-0.01

0.05

0.00

Correlation of Residuals

categories

0.01

0.01

0.06

0.01

0.04

Correlation of Residuals

digit\_tot

0.05

0.05

0.07

-0.02

0.07

Correlation of Residuals

fas

-0.00

-0.00

-0.07

-0.02

-0.07

Correlation of Residuals

information

-0.01

-0.01

-0.02

.

-0.01

Correlation of Residuals

logic\_tot

0.05

0.05

0.03

0.01

0.02

Correlation of Residuals

mmse

0.01

0.01

0.03

.

0.03

Correlation of Residuals

symbol

0.01

0.01

-0.08

0.00

-0.07

Correlation of Residuals

trailsb

-0.01

-0.01

-0.01

-0.01

-0.00

Correlation of Residuals

waisvocab

-0.01

-0.01

0.04

-0.02

0.06

Correlation of Residuals

word\_im

.

.

.

0.04

.

P-values for corresponding covariances:

label

process\_b

a

ae

aeh

aehplus

full

Covariance of Levels

block

0.00

0.01

0.08

0.23

0.41

Covariance of Levels

bnt

0.10

0.24

0.20

0.86

0.79

Covariance of Levels

categories

0.03

0.07

0.42

0.40

1.00

Covariance of Levels

digit\_tot

0.00

0.00

0.06

0.04

0.20

Covariance of Levels

fas

0.00

0.00

0.01

0.00

0.10

Covariance of Levels

information

0.37

0.59

0.25

.

0.57

Covariance of Levels

logic\_tot

0.14

0.35

0.44

0.73

0.59

Covariance of Levels

mmse

0.06

0.07

0.55

.

0.77

Covariance of Levels

symbol

0.00

0.00

0.04

0.06

0.31

Covariance of Levels

trailsb

0.04

0.07

0.24

0.96

0.39

Covariance of Levels

waisvocab

0.00

0.00

0.02

0.02

0.12

Covariance of Levels

word\_im

.

.

.

0.32

.

label

process\_b

a

ae

aeh

aehplus

full

Covariance of Slopes

block

0.27

0.14

0.96

0.82

0.99

Covariance of Slopes

bnt

0.33

0.30

0.22

0.98

0.28

Covariance of Slopes

categories

0.05

0.06

0.38

0.46

0.41

Covariance of Slopes

digit\_tot

0.10

0.08

0.12

0.08

0.14

Covariance of Slopes

fas

0.01

0.01

0.14

0.06

0.34

Covariance of Slopes

information

0.44

0.43

0.49

.

0.66

Covariance of Slopes

logic\_tot

0.55

0.58

0.67

0.40

0.63

Covariance of Slopes

mmse

0.98

0.99

0.95

.

0.93

Covariance of Slopes

symbol

0.03

0.03

0.16

0.01

0.23

Covariance of Slopes

trailsb

0.57

0.62

0.82

0.61

0.78

Covariance of Slopes

waisvocab

0.05

0.07

0.14

0.22

0.22

Covariance of Slopes

word\_im

.

.

.

0.73

.

label

process\_b

a

ae

aeh

aehplus

full

Covariance of Residuals

block

0.72

0.73

0.41

0.62

0.38

Covariance of Residuals

bnt

0.76

0.77

0.93

0.59

0.99

Covariance of Residuals

categories

0.86

0.91

0.57

0.87

0.71

Covariance of Residuals

digit\_tot

0.37

0.39

0.39

0.79

0.44

Covariance of Residuals

fas

0.98

0.96

0.35

0.81

0.41

Covariance of Residuals

information

0.81

0.81

0.87

.

0.92

Covariance of Residuals

logic\_tot

0.34

0.35

0.75

0.88

0.87

Covariance of Residuals

mmse

0.91

0.92

0.84

.

0.86

Covariance of Residuals

symbol

0.86

0.82

0.37

0.95

0.49

Covariance of Residuals

trailsb

0.88

0.87

0.88

0.86

0.97

Covariance of Residuals

waisvocab

0.83

0.83

0.64

0.81

0.56

Covariance of Residuals

word\_im

.

.

.

0.57

.

# male

Gender = *male*; Model type: *aehplus*; Process (a) = *gait*; Process (b): *block*, *bnt*, *categories*, *digit\_tot*, *fas*, *information*, *logic\_tot*, *mmse*, *symbol*, *trailsb*, *waisvocab*, *word\_im*

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| process | label | block | bnt | categories | digit\_tot | fas | logic\_tot | symbol | trailsb | waisvocab | word\_im | mean(sd) |
| a | Level | 110.04 (7.62) <.01 | 112.30 (8.10) <.01 | 113.52 (7.91) <.01 | 111.75 (7.69) <.01 | 112.02 (7.70) <.01 | 111.62 (7.69) <.01 | 109.28 (7.57) <.01 | 106.98 (17.01) <.01 | 112.28 (7.96) <.01 | 111.25 (7.53) <.01 | 111.10(1.88) |
| a | Slope | -2.46 (2.34) .29 | -2.75 (2.44) .26 | -3.07 (2.32) .19 | -3.06 (2.48) .22 | -2.61 (2.29) .26 | -2.65 (2.48) .29 | -2.83 (2.30) .22 | 111.58 (7.91) <.01 | -2.77 (2.66) .30 | -2.58 (2.41) .28 | 8.68(36.16) |
| a | Level \* age | -1.12 (0.42) .01 | -1.09 (0.42) .01 | -1.15 (0.42) .01 | -1.07 (0.42) .01 | -1.06 (0.40) .01 | -1.07 (0.41) .01 | -1.08 (0.41) .01 | -2.18 (5.62) .70 | -1.05 (0.42) .01 | -1.07 (0.40) .01 | -1.19(0.35) |
| a | Level \* education | 0.90 (0.65) .17 | 0.74 (0.68) .28 | 0.62 (0.71) .39 | 0.78 (0.67) .24 | 0.71 (0.70) .31 | 0.79 (0.65) .23 | 0.90 (0.65) .17 | -3.01 (2.47) .22 | 0.70 (0.69) .31 | 0.76 (0.67) .26 | 0.39(1.20) |
| a | Level \* height | -0.07 (0.42) .86 | 0.08 (0.45) .85 | 0.16 (0.42) .69 | -0.10 (0.42) .81 | -0.07 (0.42) .86 | 0.10 (0.41) .81 | 0.13 (0.43) .76 | -0.44 (0.64) .49 | 0.08 (0.44) .86 | 0.04 (0.39) .92 | -0.01(0.18) |
| a | Level \* smoking | -4.95 (4.55) .28 | -6.23 (4.54) .17 | -5.51 (4.71) .24 | -5.57 (4.61) .23 | -5.42 (4.52) .23 | -5.74 (4.62) .21 | -4.76 (4.57) .30 | -1.00 (0.43) .02 | -5.63 (4.66) .23 | -5.10 (4.62) .27 | -4.99(1.46) |
| a | Level \* cardio | -2.64 (4.31) .54 | -2.02 (4.63) .66 | -2.75 (4.79) .56 | -2.77 (4.61) .55 | -2.52 (4.57) .58 | -2.45 (4.78) .61 | -2.36 (4.83) .62 | 0.64 (1.31) .62 | -2.43 (4.83) .61 | -2.48 (4.89) .61 | -2.18(1.01) |
| a | Level \* diabetes | -12.76 (5.50) .02 | -12.93 (5.30) .01 | -12.90 (5.49) .02 | -13.17 (5.34) .01 | -12.62 (5.35) .02 | -13.49 (5.41) .01 | -12.37 (5.47) .02 | 0.66 (0.65) .31 | -13.06 (5.40) .02 | -12.70 (5.26) .02 | -11.53(4.30) |
| a | Slope \* age | -0.12 (0.13) .36 | -0.12 (0.13) .36 | -0.10 (0.14) .48 | -0.11 (0.13) .40 | -0.13 (0.13) .32 | -0.13 (0.12) .30 | -0.14 (0.12) .28 | 0.04 (0.60) .94 | -0.11 (0.13) .39 | -0.13 (0.13) .32 | -0.10(0.05) |
| a | Slope \* education | -0.12 (0.20) .53 | -0.10 (0.19) .59 | -0.07 (0.19) .72 | -0.09 (0.21) .66 | -0.11 (0.19) .58 | -0.10 (0.19) .61 | -0.07 (0.19) .70 | -0.05 (0.47) .91 | -0.10 (0.22) .65 | -0.09 (0.19) .62 | -0.09(0.02) |
| a | Slope \* height | 0.05 (0.13) .69 | 0.02 (0.14) .88 | -0.01 (0.13) .91 | 0.02 (0.12) .90 | 0.04 (0.14) .78 | 0.01 (0.12) .94 | 0.01 (0.13) .93 | -2.60 (10.83) .81 | 0.02 (0.13) .88 | -0.01 (0.12) .91 | -0.25(0.83) |
| a | Slope \* smoking | 1.76 (1.38) .20 | 1.86 (1.43) .19 | 1.58 (1.51) .30 | 2.08 (1.48) .16 | 1.67 (1.38) .22 | 1.75 (1.44) .22 | 1.86 (1.33) .16 | -4.50 (4.73) .34 | 1.85 (1.53) .23 | 1.65 (1.43) .25 | 1.16(1.99) |
| a | Slope \* cardio | 0.63 (1.11) .57 | 0.62 (1.26) .62 | 0.76 (1.26) .54 | 0.67 (1.21) .58 | 0.60 (1.18) .61 | 0.60 (1.16) .60 | 0.55 (1.24) .65 | -3.59 (13.21) .79 | 0.60 (1.22) .62 | 0.59 (1.26) .64 | 0.20(1.33) |
| a | Slope \* diabetes | -0.06 (1.52) .97 | 0.05 (1.41) .97 | 0.18 (1.48) .90 | 0.14 (1.49) .93 | 0.11 (1.45) .94 | 0.05 (1.54) .98 | -0.07 (1.52) .96 | -2.65 (4.78) .58 | 0.13 (1.49) .93 | -0.01 (1.40) .99 | -0.21(0.86) |
| b | Level | 15.92 (2.59) <.01 | 10.85 (0.61) <.01 | 29.87 (2.78) <.01 | 12.06 (1.06) <.01 | 20.25 (3.84) <.01 | 13.84 (2.00) <.01 | 32.41 (3.03) <.01 | -4.75 (9.17) .60 | 36.76 (3.03) <.01 | 31.02 (1.58) <.01 | --- |
| b | Slope | 1.78 (0.65) .01 | 0.11 (0.17) .54 | 0.69 (0.75) .35 | 0.33 (0.25) .18 | 1.69 (0.76) .03 | 1.84 (0.62) <.01 | 0.82 (0.81) .31 | -12.85 (5.42) .02 | 0.01 (0.88) .99 | -0.15 (0.50) .76 | --- |
| b | Level \* age | 0.01 (0.14) .95 | -0.04 (0.04) .34 | -0.19 (0.14) .18 | -0.01 (0.06) .85 | 0.29 (0.20) .14 | 0.03 (0.11) .80 | -0.22 (0.16) .16 | -0.12 (0.22) .59 | 0.37 (0.18) .04 | -0.24 (0.10) .01 | --- |
| b | Level \* education | 1.00 (0.23) <.01 | 0.19 (0.05) <.01 | 0.90 (0.22) <.01 | 0.30 (0.08) <.01 | 1.66 (0.32) <.01 | 0.85 (0.15) <.01 | 1.51 (0.27) <.01 | -0.11 (0.13) .40 | 1.52 (0.28) <.01 | 0.26 (0.13) .04 | --- |
| b | Level \* height | -0.06 (0.18) .72 | -0.00 (0.07) .98 | -0.02 (0.15) .91 | -0.14 (0.06) .02 | -0.39 (0.27) .15 | 0.09 (0.13) .48 | 0.07 (0.32) .83 | -0.27 (0.34) .42 | 0.02 (0.33) .95 | -0.23 (0.11) .05 | --- |
| b | Level \* smoking | -1.79 (1.75) .31 | 0.63 (0.39) .11 | 2.91 (1.70) .09 | 1.08 (0.72) .14 | 3.92 (2.21) .08 | 1.68 (1.34) .21 | -0.85 (2.01) .67 | -0.11 (0.18) .56 | -1.03 (2.08) .62 | -0.10 (0.91) .91 | --- |
| b | Level \* cardio | -1.26 (1.41) .37 | 0.10 (0.36) .78 | 1.48 (1.25) .24 | -0.93 (0.51) .07 | -1.09 (1.69) .52 | 0.08 (0.88) .93 | -2.69 (1.53) .08 | 0.05 (0.20) .81 | 0.86 (1.90) .65 | 1.53 (0.74) .04 | --- |
| b | Level \* diabetes | 0.69 (1.85) .71 | -0.68 (0.49) .17 | -2.46 (1.71) .15 | -1.22 (0.70) .08 | -5.69 (2.31) .01 | -0.92 (1.26) .46 | -3.62 (2.23) .10 | 0.08 (0.14) .56 | -2.55 (2.32) .27 | -2.74 (0.96) <.01 | --- |
| b | Slope \* age | -0.09 (0.04) .02 | -0.01 (0.01) .37 | -0.05 (0.04) .20 | -0.01 (0.01) .67 | -0.05 (0.04) .21 | -0.11 (0.04) .01 | -0.07 (0.05) .12 | 1.66 (2.98) .58 | -0.09 (0.05) .08 | -0.01 (0.03) .59 | --- |
| b | Slope \* education | -0.06 (0.06) .29 | -0.01 (0.01) .63 | -0.05 (0.06) .38 | -0.01 (0.02) .67 | -0.11 (0.07) .12 | -0.13 (0.05) .01 | -0.01 (0.08) .84 | 1.90 (1.48) .20 | 0.03 (0.08) .71 | -0.00 (0.04) .95 | --- |
| b | Slope \* height | -0.02 (0.05) .59 | 0.01 (0.01) .56 | -0.05 (0.04) .26 | 0.01 (0.02) .67 | 0.04 (0.07) .56 | -0.01 (0.04) .76 | 0.02 (0.08) .78 | 0.94 (4.13) .82 | -0.01 (0.07) .92 | -0.01 (0.04) .75 | --- |
| b | Slope \* smoking | 0.30 (0.41) .46 | -0.16 (0.11) .16 | -0.49 (0.41) .24 | -0.16 (0.15) .29 | -0.41 (0.46) .38 | -0.32 (0.36) .38 | 0.09 (0.50) .85 | 0.68 (1.36) .62 | -0.00 (0.54) .99 | 0.15 (0.29) .61 | --- |
| b | Slope \* cardio | 0.13 (0.34) .70 | 0.02 (0.12) .85 | 0.14 (0.36) .70 | 0.18 (0.11) .09 | 0.50 (0.48) .30 | -0.14 (0.32) .66 | 0.14 (0.52) .79 | 0.13 (3.82) .97 | -0.49 (0.52) .34 | -0.17 (0.27) .54 | --- |
| b | Slope \* diabetes | -0.66 (0.48) .17 | 0.15 (0.14) .27 | -0.01 (0.50) .98 | 0.05 (0.16) .74 | -0.48 (0.56) .40 | 0.62 (0.47) .18 | 0.55 (0.57) .33 | -0.12 (1.52) .94 | -0.56 (0.61) .36 | 0.51 (0.35) .14 | --- |
| a | Var (Level) | 301.01 (70.86) <.01 | 305.12 (72.48) <.01 | 320.64 (77.05) <.01 | 310.85 (74.16) <.01 | 307.21 (71.00) <.01 | 306.88 (78.92) <.01 | 316.10 (77.45) <.01 | 163.37 (43.63) <.01 | 304.16 (73.36) <.01 | 297.19 (69.50) <.01 | 293.25(46.15) |
| a | Var (Slope) | 2.13 (3.97) .59 | 2.29 (3.57) .52 | 3.86 (4.45) .39 | 3.15 (4.27) .46 | 2.98 (3.86) .44 | 2.22 (3.61) .54 | 3.03 (4.45) .50 | 163.75 (17.01) <.01 | 2.61 (3.74) .48 | 1.81 (3.59) .61 | 18.78(50.94) |
| a | Var (Residual) | 78.27 (9.04) <.01 | 77.72 (8.71) <.01 | 75.05 (9.09) <.01 | 76.25 (8.50) <.01 | 76.72 (8.54) <.01 | 77.73 (8.57) <.01 | 76.20 (8.58) <.01 | -2.91 (10.20) .78 | 77.47 (8.44) <.01 | 78.67 (9.69) <.01 | 69.12(25.33) |
| a | Covar (Level, Slope) | 3.00 (15.33) .84 | 1.86 (14.52) .90 | -2.42 (18.02) .89 | -0.05 (17.84) .99 | 0.59 (15.61) .97 | 2.85 (15.71) .86 | 1.04 (16.93) .95 | 2.92 (5.25) .58 | 1.30 (15.84) .93 | 4.39 (14.25) .76 | 1.55(1.93) |
| b | Var (Level) | 63.44 (11.03) <.01 | 3.49 (0.82) <.01 | 61.90 (10.64) <.01 | 10.42 (1.91) <.01 | 101.35 (20.05) <.01 | 30.12 (6.59) <.01 | 100.16 (16.59) <.01 | 0.76 (2.70) .78 | 91.57 (18.21) <.01 | 14.19 (4.41) <.01 | --- |
| b | Var (Slope) | 0.23 (0.56) .68 | 0.01 (0.05) .89 | 1.30 (0.67) .05 | 0.06 (0.07) .37 | 0.72 (1.04) .49 | 0.57 (0.37) .12 | 1.87 (0.97) .05 | 1.61 (1.07) .13 | 0.39 (1.10) .72 | 0.27 (0.32) .40 | --- |
| b | Var (Residual) | 22.18 (1.55) <.01 | 1.76 (0.13) <.01 | 18.47 (1.22) <.01 | 3.12 (0.23) <.01 | 30.02 (2.68) <.01 | 14.08 (1.02) <.01 | 28.32 (1.72) <.01 | -6.06 (4.23) .15 | 47.75 (2.96) <.01 | 12.75 (0.84) <.01 | --- |
| b | Covar (Level, Slope) | -0.84 (2.36) .72 | 0.07 (0.14) .60 | -4.61 (2.30) .04 | -0.52 (0.38) .17 | -0.41 (4.07) .92 | -0.79 (1.57) .61 | 0.23 (3.17) .94 | -6.03 (1.55) <.01 | -2.13 (4.27) .62 | 0.30 (0.95) .75 | --- |
| ab | Covar (Levels) | 45.46 (19.66) .02 | 6.14 (6.14) .32 | 44.15 (25.45) .08 | 9.48 (9.98) .34 | 26.13 (28.93) .37 | 20.53 (18.13) .26 | 68.90 (26.04) .01 | -0.69 (1.86) .71 | 6.94 (29.02) .81 | 11.33 (13.26) .39 | --- |
| ab | Covar (Slopes) | 0.22 (1.21) .86 | -0.00 (0.42) .99 | 1.74 (1.19) .14 | 0.18 (0.40) .66 | 0.81 (1.55) .60 | 0.10 (0.82) .90 | 1.59 (1.33) .23 | -0.15 (1.52) .92 | -0.34 (1.69) .84 | 0.09 (0.88) .92 | --- |
| ab | Covar (Residuals) | -3.20 (3.46) .35 | 0.29 (0.95) .76 | 0.06 (3.21) .98 | -0.86 (1.49) .56 | 0.86 (4.62) .85 | -0.92 (3.23) .78 | -0.48 (4.28) .91 | -0.85 (36.70) .98 | -3.81 (6.28) .54 | 2.95 (2.69) .27 | --- |
| a | Level | 110.04 (7.62) <.01 | 112.30 (8.10) <.01 | 113.52 (7.91) <.01 | 111.75 (7.69) <.01 | 112.02 (7.70) <.01 | 111.62 (7.69) <.01 | 109.28 (7.57) <.01 | -1.04 (12.43) .93 | 112.28 (7.96) <.01 | 111.25 (7.53) <.01 | 100.30(35.63) |
| a | Slope | -2.46 (2.34) .29 | -2.75 (2.44) .26 | -3.07 (2.32) .19 | -3.06 (2.48) .22 | -2.61 (2.29) .26 | -2.65 (2.48) .29 | -2.83 (2.30) .22 | 19.32 (34.02) .57 | -2.77 (2.66) .30 | -2.58 (2.41) .28 | -0.55(6.98) |
| a | Level \* age | -1.12 (0.42) .01 | -1.09 (0.42) .01 | -1.15 (0.42) .01 | -1.07 (0.42) .01 | -1.06 (0.40) .01 | -1.07 (0.41) .01 | -1.08 (0.41) .01 | 2.17 (10.49) .84 | -1.05 (0.42) .01 | -1.07 (0.40) .01 | -0.76(1.03) |
| a | Level \* education | 0.90 (0.65) .17 | 0.74 (0.68) .28 | 0.62 (0.71) .39 | 0.78 (0.67) .24 | 0.71 (0.70) .31 | 0.79 (0.65) .23 | 0.90 (0.65) .17 | 6.71 (22.98) .77 | 0.70 (0.69) .31 | 0.76 (0.67) .26 | 1.36(1.88) |
| a | Level \* height | -0.07 (0.42) .86 | 0.08 (0.45) .85 | 0.16 (0.42) .69 | -0.10 (0.42) .81 | -0.07 (0.42) .86 | 0.10 (0.41) .81 | 0.13 (0.43) .76 | 4.01 (11.70) .73 | 0.08 (0.44) .86 | 0.04 (0.39) .92 | 0.44(1.26) |
| a | Level \* smoking | -4.95 (4.55) .28 | -6.23 (4.54) .17 | -5.51 (4.71) .24 | -5.57 (4.61) .23 | -5.42 (4.52) .23 | -5.74 (4.62) .21 | -4.76 (4.57) .30 | 0.31 (0.63) .62 | -5.63 (4.66) .23 | -5.10 (4.62) .27 | -4.86(1.86) |
| a | Level \* cardio | -2.64 (4.31) .54 | -2.02 (4.63) .66 | -2.75 (4.79) .56 | -2.77 (4.61) .55 | -2.52 (4.57) .58 | -2.45 (4.78) .61 | -2.36 (4.83) .62 | 0.26 (0.31) .41 | -2.43 (4.83) .61 | -2.48 (4.89) .61 | -2.22(0.90) |
| a | Level \* diabetes | -12.76 (5.50) .02 | -12.93 (5.30) .01 | -12.90 (5.49) .02 | -13.17 (5.34) .01 | -12.62 (5.35) .02 | -13.49 (5.41) .01 | -12.37 (5.47) .02 | 0.04 (1.00) .97 | -13.06 (5.40) .02 | -12.70 (5.26) .02 | -11.60(4.10) |
| a | Slope \* age | -0.12 (0.13) .36 | -0.12 (0.13) .36 | -0.10 (0.14) .48 | -0.11 (0.13) .40 | -0.13 (0.13) .32 | -0.13 (0.12) .30 | -0.14 (0.12) .28 | -0.24 (0.51) .64 | -0.11 (0.13) .39 | -0.13 (0.13) .32 | -0.13(0.04) |
| a | Slope \* education | -0.12 (0.20) .53 | -0.10 (0.19) .59 | -0.07 (0.19) .72 | -0.09 (0.21) .66 | -0.11 (0.19) .58 | -0.10 (0.19) .61 | -0.07 (0.19) .70 | 0.45 (0.50) .37 | -0.10 (0.22) .65 | -0.09 (0.19) .62 | -0.04(0.17) |
| a | Slope \* height | 0.05 (0.13) .69 | 0.02 (0.14) .88 | -0.01 (0.13) .91 | 0.02 (0.12) .90 | 0.04 (0.14) .78 | 0.01 (0.12) .94 | 0.01 (0.13) .93 | 0.49 (0.36) .18 | 0.02 (0.13) .88 | -0.01 (0.12) .91 | 0.06(0.15) |
| a | Slope \* smoking | 1.76 (1.38) .20 | 1.86 (1.43) .19 | 1.58 (1.51) .30 | 2.08 (1.48) .16 | 1.67 (1.38) .22 | 1.75 (1.44) .22 | 1.86 (1.33) .16 | -1.75 (9.20) .85 | 1.85 (1.53) .23 | 1.65 (1.43) .25 | 1.43(1.13) |
| a | Slope \* cardio | 0.63 (1.11) .57 | 0.62 (1.26) .62 | 0.76 (1.26) .54 | 0.67 (1.21) .58 | 0.60 (1.18) .61 | 0.60 (1.16) .60 | 0.55 (1.24) .65 | -3.64 (3.63) .32 | 0.60 (1.22) .62 | 0.59 (1.26) .64 | 0.20(1.35) |
| a | Slope \* diabetes | -0.06 (1.52) .97 | 0.05 (1.41) .97 | 0.18 (1.48) .90 | 0.14 (1.49) .93 | 0.11 (1.45) .94 | 0.05 (1.54) .98 | -0.07 (1.52) .96 | -7.20 (14.02) .61 | 0.13 (1.49) .93 | -0.01 (1.40) .99 | -0.67(2.30) |
| b | Level | 15.92 (2.59) <.01 | 10.85 (0.61) <.01 | 29.87 (2.78) <.01 | 12.06 (1.06) <.01 | 20.25 (3.84) <.01 | 13.84 (2.00) <.01 | 32.41 (3.03) <.01 | -0.54 (3.94) .89 | 36.76 (3.03) <.01 | 31.02 (1.58) <.01 | --- |
| b | Slope | 1.78 (0.65) .01 | 0.11 (0.17) .54 | 0.69 (0.75) .35 | 0.33 (0.25) .18 | 1.69 (0.76) .03 | 1.84 (0.62) <.01 | 0.82 (0.81) .31 | 2.08 (8.49) .81 | 0.01 (0.88) .99 | -0.15 (0.50) .76 | --- |
| b | Level \* age | 0.01 (0.14) .95 | -0.04 (0.04) .34 | -0.19 (0.14) .18 | -0.01 (0.06) .85 | 0.29 (0.20) .14 | 0.03 (0.11) .80 | -0.22 (0.16) .16 | 5.73 (3.51) .10 | 0.37 (0.18) .04 | -0.24 (0.10) .01 | --- |
| b | Level \* education | 1.00 (0.23) <.01 | 0.19 (0.05) <.01 | 0.90 (0.22) <.01 | 0.30 (0.08) <.01 | 1.66 (0.32) <.01 | 0.85 (0.15) <.01 | 1.51 (0.27) <.01 | 226.86 (129.33) .08 | 1.52 (0.28) <.01 | 0.26 (0.13) .04 | --- |
| b | Level \* height | -0.06 (0.18) .72 | -0.00 (0.07) .98 | -0.02 (0.15) .91 | -0.14 (0.06) .02 | -0.39 (0.27) .15 | 0.09 (0.13) .48 | 0.07 (0.32) .83 | 302.24 (72.23) <.01 | 0.02 (0.33) .95 | -0.23 (0.11) .05 | --- |
| b | Level \* smoking | -1.79 (1.75) .31 | 0.63 (0.39) .11 | 2.91 (1.70) .09 | 1.08 (0.72) .14 | 3.92 (2.21) .08 | 1.68 (1.34) .21 | -0.85 (2.01) .67 | 2.23 (4.95) .65 | -1.03 (2.08) .62 | -0.10 (0.91) .91 | --- |
| b | Level \* cardio | -1.26 (1.41) .37 | 0.10 (0.36) .78 | 1.48 (1.25) .24 | -0.93 (0.51) .07 | -1.09 (1.69) .52 | 0.08 (0.88) .93 | -2.69 (1.53) .08 | 3.21 (3.99) .42 | 0.86 (1.90) .65 | 1.53 (0.74) .04 | --- |
| b | Level \* diabetes | 0.69 (1.85) .71 | -0.68 (0.49) .17 | -2.46 (1.71) .15 | -1.22 (0.70) .08 | -5.69 (2.31) .01 | -0.92 (1.26) .46 | -3.62 (2.23) .10 | 71.78 (14.37) <.01 | -2.55 (2.32) .27 | -2.74 (0.96) <.01 | --- |
| b | Slope \* age | -0.09 (0.04) .02 | -0.01 (0.01) .37 | -0.05 (0.04) .20 | -0.01 (0.01) .67 | -0.05 (0.04) .21 | -0.11 (0.04) .01 | -0.07 (0.05) .12 | 76.60 (8.35) <.01 | -0.09 (0.05) .08 | -0.01 (0.03) .59 | --- |
| b | Slope \* education | -0.06 (0.06) .29 | -0.01 (0.01) .63 | -0.05 (0.06) .38 | -0.01 (0.02) .67 | -0.11 (0.07) .12 | -0.13 (0.05) .01 | -0.01 (0.08) .84 | -5.45 (25.08) .83 | 0.03 (0.08) .71 | -0.00 (0.04) .95 | --- |
| b | Slope \* height | -0.02 (0.05) .59 | 0.01 (0.01) .56 | -0.05 (0.04) .26 | 0.01 (0.02) .67 | 0.04 (0.07) .56 | -0.01 (0.04) .76 | 0.02 (0.08) .78 | 1.48 (16.01) .93 | -0.01 (0.07) .92 | -0.01 (0.04) .75 | --- |
| b | Slope \* smoking | 0.30 (0.41) .46 | -0.16 (0.11) .16 | -0.49 (0.41) .24 | -0.16 (0.15) .29 | -0.41 (0.46) .38 | -0.32 (0.36) .38 | 0.09 (0.50) .85 | 1607.71 (1117.90) .15 | -0.00 (0.54) .99 | 0.15 (0.29) .61 | --- |
| b | Slope \* cardio | 0.13 (0.34) .70 | 0.02 (0.12) .85 | 0.14 (0.36) .70 | 0.18 (0.11) .09 | 0.50 (0.48) .30 | -0.14 (0.32) .66 | 0.14 (0.52) .79 | 2354.97 (504.14) <.01 | -0.49 (0.52) .34 | -0.17 (0.27) .54 | --- |
| b | Slope \* diabetes | -0.66 (0.48) .17 | 0.15 (0.14) .27 | -0.01 (0.50) .98 | 0.05 (0.16) .74 | -0.48 (0.56) .40 | 0.62 (0.47) .18 | 0.55 (0.57) .33 | 28.55 (55.08) .60 | -0.56 (0.61) .36 | 0.51 (0.35) .14 | --- |
| a | Var (Level) | 301.01 (70.86) <.01 | 305.12 (72.48) <.01 | 320.64 (77.05) <.01 | 310.85 (74.16) <.01 | 307.21 (71.00) <.01 | 306.88 (78.92) <.01 | 316.10 (77.45) <.01 | 35.16 (34.05) .30 | 304.16 (73.36) <.01 | 297.19 (69.50) <.01 | 280.43(86.45) |
| a | Var (Slope) | 2.13 (3.97) .59 | 2.29 (3.57) .52 | 3.86 (4.45) .39 | 3.15 (4.27) .46 | 2.98 (3.86) .44 | 2.22 (3.61) .54 | 3.03 (4.45) .50 | 1595.86 (194.81) <.01 | 2.61 (3.74) .48 | 1.81 (3.59) .61 | 161.99(503.81) |
| a | Var (Residual) | 78.27 (9.04) <.01 | 77.72 (8.71) <.01 | 75.05 (9.09) <.01 | 76.25 (8.50) <.01 | 76.72 (8.54) <.01 | 77.73 (8.57) <.01 | 76.20 (8.58) <.01 | 1467.17 (70.88) <.01 | 77.47 (8.44) <.01 | 78.67 (9.69) <.01 | 216.12(439.57) |
| a | Covar (Level, Slope) | 3.00 (15.33) .84 | 1.86 (14.52) .90 | -2.42 (18.02) .89 | -0.05 (17.84) .99 | 0.59 (15.61) .97 | 2.85 (15.71) .86 | 1.04 (16.93) .95 | -86.01 (259.14) .74 | 1.30 (15.84) .93 | 4.39 (14.25) .76 | -7.34(27.70) |
| b | Var (Level) | 63.44 (11.03) <.01 | 3.49 (0.82) <.01 | 61.90 (10.64) <.01 | 10.42 (1.91) <.01 | 101.35 (20.05) <.01 | 30.12 (6.59) <.01 | 100.16 (16.59) <.01 | -43.29 (118.05) .71 | 91.57 (18.21) <.01 | 14.19 (4.41) <.01 | --- |
| b | Var (Slope) | 0.23 (0.56) .68 | 0.01 (0.05) .89 | 1.30 (0.67) .05 | 0.06 (0.07) .37 | 0.72 (1.04) .49 | 0.57 (0.37) .12 | 1.87 (0.97) .05 | -9.08 (280.36) .97 | 0.39 (1.10) .72 | 0.27 (0.32) .40 | --- |
| b | Var (Residual) | 22.18 (1.55) <.01 | 1.76 (0.13) <.01 | 18.47 (1.22) <.01 | 3.12 (0.23) <.01 | 30.02 (2.68) <.01 | 14.08 (1.02) <.01 | 28.32 (1.72) <.01 | -225.90 (171.18) .19 | 47.75 (2.96) <.01 | 12.75 (0.84) <.01 | --- |
| b | Covar (Level, Slope) | -0.84 (2.36) .72 | 0.07 (0.14) .60 | -4.61 (2.30) .04 | -0.52 (0.38) .17 | -0.41 (4.07) .92 | -0.79 (1.57) .61 | 0.23 (3.17) .94 | -5.16 (15.37) .74 | -2.13 (4.27) .62 | 0.30 (0.95) .75 | --- |
| ab | Covar (Levels) | 45.46 (19.66) .02 | 6.14 (6.14) .32 | 44.15 (25.45) .08 | 9.48 (9.98) .34 | 26.13 (28.93) .37 | 20.53 (18.13) .26 | 68.90 (26.04) .01 | -7.09 (13.23) .59 | 6.94 (29.02) .81 | 11.33 (13.26) .39 | --- |
| ab | Covar (Slopes) | 0.22 (1.21) .86 | -0.00 (0.42) .99 | 1.74 (1.19) .14 | 0.18 (0.40) .66 | 0.81 (1.55) .60 | 0.10 (0.82) .90 | 1.59 (1.33) .23 | 9.99 (48.12) .84 | -0.34 (1.69) .84 | 0.09 (0.88) .92 | --- |
| ab | Covar (Residuals) | -3.20 (3.46) .35 | 0.29 (0.95) .76 | 0.06 (3.21) .98 | -0.86 (1.49) .56 | 0.86 (4.62) .85 | -0.92 (3.23) .78 | -0.48 (4.28) .91 | 57.56 (34.95) .10 | -3.81 (6.28) .54 | 2.95 (2.69) .27 | --- |
|  | Correlation of Levels | 0.329 | 0.188 | 0.3134 | 0.167 | 0.148 | 0.214 | 0.39 | -0.015 | 0.042 | 0.174 | 0.19(0.12) |
|  | Correlation of Slopes | 0.313 | -0.039 | 0.7768 | 0.394 | 0.554 | 0.093 | 0.67 | -0.268 | -0.341 | 0.127 | 0.23(0.38) |
|  | Correlation of Residuals | -0.077 | 0.025 | 0.0017 | -0.056 | 0.018 | -0.028 | -0.01 | -0.646 | -0.063 | 0.093 | -0.07(0.21) |
|  | Correlation of Levels | 0.329 | 0.188 | 0.3134 | 0.167 | 0.148 | 0.214 | 0.39 | -0.668 | 0.042 | 0.174 | 0.13(0.30) |
|  | Correlation of Slopes | 0.313 | -0.039 | 0.7768 | 0.394 | 0.554 | 0.093 | 0.67 | 0.030 | -0.341 | 0.127 | 0.26(0.35) |
|  | Correlation of Residuals | -0.077 | 0.025 | 0.0017 | -0.056 | 0.018 | -0.028 | -0.01 | 0.172 | -0.063 | 0.093 | 0.01(0.08) |
|  | N | 210 | 222 | 222 | 222 | 222 | 218 | 221 | 72 | 222 | 222 | 205.30(46.99) |
|  | occasions | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 8 | 5 | 5 | 5.30(0.95) |
|  | parameters | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 41 | 43 | 43 | 42.80(0.63) |
|  | LL | -4,378 | -3,504 | -4,491 | -3,762 | -4,597 | -4,177 | -4,663 | -2,660 | -4,805 | -4,265 | -4,130( 655) |
|  | AIC | 8,841 | 7,095 | 9,068 | 7,609 | 9,281 | 8,439 | 9,412 | 5,402 | 9,695 | 8,617 | 8,346(1,311) |
|  | BIC | 8,985 | 7,241 | 9,215 | 7,756 | 9,427 | 8,585 | 9,558 | 5,495 | 9,842 | 8,763 | 8,487(1,324) |

## block

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 107.77 (3.23) <.01 | 107.61 (5.32) <.01 | 102.87 (9.91) <.01 | 110.04 (7.62) <.01 | 107.73 (15.97) <.01 |
| a | Slope | -2.08 (0.73) <.01 | -2.04 (1.21) .09 | -0.48 (3.04) .88 | -2.46 (2.34) .29 | -1.48 (6.11) .81 |
| a | Level \* age | -1.06 (0.37) <.01 | -1.06 (0.37) <.01 | -0.42 (0.48) .38 | -1.12 (0.42) .01 | -0.48 (0.59) .41 |
| a | Level \* education | --- | 0.02 (0.60) .97 | 0.69 (0.72) .34 | 0.90 (0.65) .17 | 0.69 (1.03) .50 |
| a | Level \* height | --- | --- | 0.04 (0.35) .91 | -0.07 (0.42) .86 | -0.04 (0.52) .95 |
| a | Level \* smoking | --- | --- | --- | -4.95 (4.55) .28 | -1.26 (8.27) .88 |
| a | Level \* cardio | --- | --- | --- | -2.64 (4.31) .54 | -4.62 (13.54) .73 |
| a | Level \* diabetes | --- | --- | --- | -12.76 (5.50) .02 | -5.15 (8.27) .53 |
| a | Slope \* age | -0.10 (0.09) .25 | -0.10 (0.09) .25 | -0.14 (0.16) .38 | -0.12 (0.13) .36 | -0.11 (0.26) .67 |
| a | Slope \* education | --- | -0.00 (0.15) .97 | -0.27 (0.19) .16 | -0.12 (0.20) .53 | -0.29 (0.30) .34 |
| a | Slope \* height | --- | --- | 0.04 (0.14) .80 | 0.05 (0.13) .69 | 0.10 (0.20) .64 |
| a | Slope \* smoking | --- | --- | --- | 1.76 (1.38) .20 | 0.44 (2.63) .87 |
| a | Slope \* cardio | --- | --- | --- | 0.63 (1.11) .57 | 1.63 (3.30) .62 |
| a | Slope \* diabetes | --- | --- | --- | -0.06 (1.52) .97 | 0.68 (2.61) .79 |
| b | Level | 20.48 (1.04) <.01 | 20.44 (1.08) <.01 | 19.41 (6.07) <.01 | 15.92 (2.59) <.01 | 22.34 (9.15) .01 |
| b | Slope | 0.93 (0.21) <.01 | 0.93 (0.31) <.01 | 1.84 (1.10) .10 | 1.78 (0.65) .01 | 1.43 (1.89) .45 |
| b | Level \* age | 0.00 (0.11) .99 | 0.00 (0.11) .99 | 0.32 (0.37) .39 | 0.01 (0.14) .95 | 0.28 (0.48) .56 |
| b | Level \* education | --- | 0.00 (0.04) .90 | 0.71 (0.48) .14 | 1.00 (0.23) <.01 | 0.54 (0.60) .37 |
| b | Level \* height | --- | --- | 0.00 (0.17) .98 | -0.06 (0.18) .72 | 0.08 (0.27) .78 |
| b | Level \* smoking | --- | --- | --- | -1.79 (1.75) .31 | -3.46 (4.04) .39 |
| b | Level \* cardio | --- | --- | --- | -1.26 (1.41) .37 | -0.21 (4.56) .96 |
| b | Level \* diabetes | --- | --- | --- | 0.69 (1.85) .71 | -4.17 (4.20) .32 |
| b | Slope \* age | -0.06 (0.02) <.01 | -0.06 (0.02) <.01 | -0.09 (0.06) .13 | -0.09 (0.04) .02 | -0.08 (0.09) .38 |
| b | Slope \* education | --- | -0.00 (0.03) .98 | -0.09 (0.08) .30 | -0.06 (0.06) .29 | -0.06 (0.10) .57 |
| b | Slope \* height | --- | --- | -0.03 (0.04) .45 | -0.02 (0.05) .59 | -0.06 (0.07) .45 |
| b | Slope \* smoking | --- | --- | --- | 0.30 (0.41) .46 | 0.35 (0.84) .68 |
| b | Slope \* cardio | --- | --- | --- | 0.13 (0.34) .70 | 0.16 (1.56) .92 |
| b | Slope \* diabetes | --- | --- | --- | -0.66 (0.48) .17 | -0.62 (1.29) .63 |
| a | Var (Level) | 320.48 (57.32) <.01 | 319.62 (57.93) <.01 | 211.98 (81.57) .01 | 301.01 (70.86) <.01 | 215.40 (125.45) .09 |
| a | Var (Slope) | 2.42 (1.49) .10 | 2.37 (1.56) .13 | 1.69 (4.42) .70 | 2.13 (3.97) .59 | 0.86 (6.31) .89 |
| a | Var (Residual) | 79.81 (7.17) <.01 | 79.90 (7.24) <.01 | 73.33 (14.71) <.01 | 78.27 (9.04) <.01 | 74.81 (19.04) <.01 |
| a | Covar (Level, Slope) | 5.66 (9.90) .57 | 5.88 (10.11) .56 | 1.59 (18.65) .93 | 3.00 (15.33) .84 | -2.32 (26.74) .93 |
| b | Var (Level) | 76.85 (8.72) <.01 | 76.75 (8.77) <.01 | 46.49 (18.73) .01 | 63.44 (11.03) <.01 | 42.89 (22.64) .06 |
| b | Var (Slope) | 0.17 (0.20) .40 | 0.16 (0.23) .48 | 0.07 (0.47) .89 | 0.23 (0.56) .68 | 0.18 (0.75) .81 |
| b | Var (Residual) | 22.26 (1.12) <.01 | 22.27 (1.13) <.01 | 23.60 (2.29) <.01 | 22.18 (1.55) <.01 | 23.43 (2.85) <.01 |
| b | Covar (Level, Slope) | -2.16 (1.32) .10 | -2.14 (1.45) .14 | -0.03 (2.50) .99 | -0.84 (2.36) .72 | -1.46 (3.64) .69 |
| ab | Covar (Levels) | 62.39 (17.83) <.01 | 62.16 (19.39) <.01 | 28.14 (30.77) .36 | 45.46 (19.66) .02 | 24.18 (43.94) .58 |
| ab | Covar (Slopes) | 0.25 (0.44) .58 | 0.25 (0.48) .61 | 0.07 (1.20) .95 | 0.22 (1.21) .86 | 0.07 (1.82) .97 |
| ab | Covar (Residuals) | -2.04 (3.05) .50 | -2.06 (3.10) .51 | 0.61 (5.36) .91 | -3.20 (3.46) .35 | 0.12 (6.70) .98 |
|  | Correlation of Levels | 0.398 | 0.397 | 0.284 | 0.329 | 0.252 |
|  | Correlation of Slopes | 0.392 | 0.396 | 0.217 | 0.313 | 0.172 |
|  | Correlation of Residuals | -0.048 | -0.049 | 0.015 | -0.077 | 0.003 |
|  | N | 350 | 350 | 72 | 210 | 72 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -5,410 | -5,410 | -1,934 | -4,378 | -1,921 |
|  | AIC | 10,863 | 10,870 | 3,925 | 8,841 | 3,932 |
|  | BIC | 10,944 | 10,967 | 3,991 | 8,985 | 4,034 |

## bnt

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 109.08 (3.34) <.01 | 108.47 (5.63) <.01 | 101.88 (11.39) <.01 | 112.30 (8.10) <.01 | 106.60 (18.89) <.01 |
| a | Slope | -2.31 (0.80) <.01 | -2.29 (1.27) .07 | 0.14 (3.42) .97 | -2.75 (2.44) .26 | -0.95 (7.91) .90 |
| a | Level \* age | -0.99 (0.36) .01 | -0.98 (0.36) .01 | -0.43 (0.51) .41 | -1.09 (0.42) .01 | -0.47 (0.73) .52 |
| a | Level \* education | --- | 0.08 (0.61) .89 | 0.66 (0.80) .41 | 0.74 (0.68) .28 | 0.71 (1.32) .59 |
| a | Level \* height | --- | --- | 0.13 (0.37) .72 | 0.08 (0.45) .85 | -0.02 (0.50) .97 |
| a | Level \* smoking | --- | --- | --- | -6.23 (4.54) .17 | -0.89 (8.12) .91 |
| a | Level \* cardio | --- | --- | --- | -2.02 (4.63) .66 | -4.37 (13.60) .75 |
| a | Level \* diabetes | --- | --- | --- | -12.93 (5.30) .01 | -5.64 (11.52) .62 |
| a | Slope \* age | -0.10 (0.09) .26 | -0.10 (0.09) .26 | -0.15 (0.17) .39 | -0.12 (0.13) .36 | -0.12 (0.24) .61 |
| a | Slope \* education | --- | -0.00 (0.14) .98 | -0.26 (0.19) .18 | -0.10 (0.19) .59 | -0.29 (0.45) .51 |
| a | Slope \* height | --- | --- | -0.01 (0.12) .95 | 0.02 (0.14) .88 | 0.09 (0.19) .62 |
| a | Slope \* smoking | --- | --- | --- | 1.86 (1.43) .19 | 0.27 (3.46) .94 |
| a | Slope \* cardio | --- | --- | --- | 0.62 (1.26) .62 | 1.59 (3.77) .67 |
| a | Slope \* diabetes | --- | --- | --- | 0.05 (1.41) .97 | 0.96 (3.93) .81 |
| b | Level | 12.06 (0.28) <.01 | 12.05 (0.29) <.01 | 11.77 (1.17) <.01 | 10.85 (0.61) <.01 | 10.81 (2.14) <.01 |
| b | Slope | -0.02 (0.06) .79 | -0.02 (0.10) .86 | 0.03 (0.35) .93 | 0.11 (0.17) .54 | 0.27 (0.58) .64 |
| b | Level \* age | -0.01 (0.03) .65 | -0.01 (0.03) .66 | 0.02 (0.06) .73 | -0.04 (0.04) .34 | 0.05 (0.10) .62 |
| b | Level \* education | --- | 0.00 (0.01) .95 | 0.07 (0.10) .45 | 0.19 (0.05) <.01 | 0.10 (0.17) .56 |
| b | Level \* height | --- | --- | 0.01 (0.05) .82 | -0.00 (0.07) .98 | 0.00 (0.05) .99 |
| b | Level \* smoking | --- | --- | --- | 0.63 (0.39) .11 | 1.03 (1.07) .33 |
| b | Level \* cardio | --- | --- | --- | 0.10 (0.36) .78 | -0.25 (1.39) .86 |
| b | Level \* diabetes | --- | --- | --- | -0.68 (0.49) .17 | -0.54 (1.16) .64 |
| b | Slope \* age | -0.01 (0.01) .08 | -0.01 (0.01) .08 | -0.02 (0.02) .18 | -0.01 (0.01) .37 | -0.03 (0.03) .33 |
| b | Slope \* education | --- | 0.00 (0.01) .99 | -0.00 (0.02) .92 | -0.01 (0.01) .63 | -0.01 (0.04) .84 |
| b | Slope \* height | --- | --- | 0.00 (0.01) .74 | 0.01 (0.01) .56 | 0.01 (0.02) .69 |
| b | Slope \* smoking | --- | --- | --- | -0.16 (0.11) .16 | -0.26 (0.35) .45 |
| b | Slope \* cardio | --- | --- | --- | 0.02 (0.12) .85 | -0.03 (0.71) .97 |
| b | Slope \* diabetes | --- | --- | --- | 0.15 (0.14) .27 | 0.29 (0.29) .30 |
| a | Var (Level) | 324.68 (57.23) <.01 | 322.88 (59.41) <.01 | 215.74 (87.78) .01 | 305.12 (72.48) <.01 | 219.36 (129.30) .09 |
| a | Var (Slope) | 2.13 (1.44) .14 | 2.08 (1.49) .16 | 1.65 (3.86) .67 | 2.29 (3.57) .52 | 0.91 (5.24) .86 |
| a | Var (Residual) | 79.77 (7.40) <.01 | 79.85 (7.52) <.01 | 73.53 (14.71) <.01 | 77.72 (8.71) <.01 | 75.46 (21.12) <.01 |
| a | Covar (Level, Slope) | 5.96 (9.26) .52 | 6.24 (9.37) .51 | 0.45 (18.55) .98 | 1.86 (14.52) .90 | -4.04 (25.84) .88 |
| b | Var (Level) | 4.51 (0.56) <.01 | 4.51 (0.57) <.01 | 1.79 (1.06) .09 | 3.49 (0.82) <.01 | 1.64 (1.56) .29 |
| b | Var (Slope) | 0.00 (0.02) .78 | 0.00 (0.02) .80 | 0.02 (0.04) .62 | 0.01 (0.05) .89 | 0.03 (0.05) .61 |
| b | Var (Residual) | 1.97 (0.10) <.01 | 1.97 (0.10) <.01 | 1.67 (0.15) <.01 | 1.76 (0.13) <.01 | 1.59 (0.23) <.01 |
| b | Covar (Level, Slope) | 0.04 (0.10) .71 | 0.04 (0.10) .71 | 0.16 (0.19) .40 | 0.07 (0.14) .60 | 0.19 (0.26) .47 |
| ab | Covar (Levels) | 7.66 (5.04) .13 | 7.51 (5.28) .15 | 4.23 (6.20) .49 | 6.14 (6.14) .32 | 3.62 (8.28) .66 |
| ab | Covar (Slopes) | 0.04 (0.16) .83 | 0.04 (0.16) .83 | 0.06 (0.38) .88 | -0.00 (0.42) .99 | 0.06 (0.49) .91 |
| ab | Covar (Residuals) | 0.40 (0.78) .60 | 0.40 (0.79) .61 | -0.40 (1.55) .80 | 0.29 (0.95) .76 | -0.32 (2.28) .89 |
|  | Correlation of Levels | 0.200 | 0.197 | 0.215 | 0.188 | 0.191 |
|  | Correlation of Slopes | 0.379 | 0.383 | 0.333 | -0.039 | 0.364 |
|  | Correlation of Residuals | 0.032 | 0.032 | -0.036 | 0.025 | -0.029 |
|  | N | 376 | 376 | 72 | 222 | 72 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -4,261 | -4,261 | -1,493 | -3,504 | -1,484 |
|  | AIC | 8,564 | 8,572 | 3,044 | 7,095 | 3,057 |
|  | BIC | 8,647 | 8,670 | 3,110 | 7,241 | 3,160 |

## categories

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 109.17 (3.39) <.01 | 106.56 (5.88) <.01 | 101.75 (10.95) <.01 | 113.52 (7.91) <.01 | 107.65 (19.03) <.01 |
| a | Slope | -2.40 (0.78) <.01 | -1.54 (1.14) .18 | 0.27 (2.93) .93 | -3.07 (2.32) .19 | -1.70 (6.64) .80 |
| a | Level \* age | -1.07 (0.38) <.01 | -1.05 (0.38) .01 | -0.48 (0.54) .37 | -1.15 (0.42) .01 | -0.56 (0.77) .47 |
| a | Level \* education | --- | 0.35 (0.62) .58 | 0.69 (0.86) .42 | 0.62 (0.71) .39 | 0.79 (1.23) .52 |
| a | Level \* height | --- | --- | 0.15 (0.38) .69 | 0.16 (0.42) .69 | 0.02 (0.59) .97 |
| a | Level \* smoking | --- | --- | --- | -5.51 (4.71) .24 | -2.23 (9.45) .81 |
| a | Level \* cardio | --- | --- | --- | -2.75 (4.79) .56 | -4.18 (11.68) .72 |
| a | Level \* diabetes | --- | --- | --- | -12.90 (5.49) .02 | -4.53 (10.07) .65 |
| a | Slope \* age | -0.08 (0.09) .34 | -0.09 (0.09) .28 | -0.13 (0.16) .41 | -0.10 (0.14) .48 | -0.07 (0.23) .76 |
| a | Slope \* education | --- | -0.11 (0.14) .40 | -0.28 (0.20) .16 | -0.07 (0.19) .72 | -0.34 (0.36) .33 |
| a | Slope \* height | --- | --- | -0.02 (0.11) .87 | -0.01 (0.13) .91 | 0.07 (0.18) .70 |
| a | Slope \* smoking | --- | --- | --- | 1.58 (1.51) .30 | 1.18 (3.39) .73 |
| a | Slope \* cardio | --- | --- | --- | 0.76 (1.26) .54 | 1.50 (3.64) .68 |
| a | Slope \* diabetes | --- | --- | --- | 0.18 (1.48) .90 | 0.40 (3.74) .91 |
| b | Level | 36.92 (0.96) <.01 | 36.78 (1.01) <.01 | 33.92 (5.40) <.01 | 29.87 (2.78) <.01 | 32.96 (8.50) <.01 |
| b | Slope | -0.20 (0.23) .38 | -0.14 (0.35) .69 | 0.81 (1.23) .51 | 0.69 (0.75) .35 | 0.94 (1.98) .64 |
| b | Level \* age | -0.19 (0.10) .05 | -0.19 (0.10) .05 | -0.21 (0.41) .61 | -0.19 (0.14) .18 | -0.17 (0.50) .73 |
| b | Level \* education | --- | 0.02 (0.04) .67 | 0.94 (0.55) .09 | 0.90 (0.22) <.01 | 1.03 (0.73) .16 |
| b | Level \* height | --- | --- | -0.08 (0.16) .62 | -0.02 (0.15) .91 | -0.09 (0.24) .71 |
| b | Level \* smoking | --- | --- | --- | 2.91 (1.70) .09 | 2.79 (5.48) .61 |
| b | Level \* cardio | --- | --- | --- | 1.48 (1.25) .24 | 0.13 (9.99) .99 |
| b | Level \* diabetes | --- | --- | --- | -2.46 (1.71) .15 | -0.25 (3.61) .95 |
| b | Slope \* age | -0.04 (0.02) .09 | -0.04 (0.02) .09 | -0.06 (0.08) .47 | -0.05 (0.04) .20 | -0.07 (0.09) .47 |
| b | Slope \* education | --- | -0.01 (0.04) .79 | -0.10 (0.12) .39 | -0.05 (0.06) .38 | -0.11 (0.17) .54 |
| b | Slope \* height | --- | --- | -0.02 (0.04) .55 | -0.05 (0.04) .26 | -0.02 (0.07) .73 |
| b | Slope \* smoking | --- | --- | --- | -0.49 (0.41) .24 | -0.39 (1.02) .70 |
| b | Slope \* cardio | --- | --- | --- | 0.14 (0.36) .70 | 0.05 (1.47) .97 |
| b | Slope \* diabetes | --- | --- | --- | -0.01 (0.50) .98 | 0.25 (0.98) .80 |
| a | Var (Level) | 332.03 (60.70) <.01 | 324.04 (61.83) <.01 | 225.39 (105.12) .03 | 320.64 (77.05) <.01 | 239.78 (151.76) .11 |
| a | Var (Slope) | 2.49 (1.51) .10 | 2.05 (1.44) .15 | 2.27 (4.39) .60 | 3.86 (4.45) .39 | 3.02 (7.82) .70 |
| a | Var (Residual) | 78.92 (7.22) <.01 | 79.62 (7.39) <.01 | 72.42 (16.01) <.01 | 75.05 (9.09) <.01 | 72.28 (20.08) <.01 |
| a | Covar (Level, Slope) | 4.36 (10.19) .67 | 6.14 (9.96) .54 | -2.08 (21.01) .92 | -2.42 (18.02) .89 | -11.16 (31.48) .72 |
| b | Var (Level) | 70.51 (7.82) <.01 | 70.07 (7.80) <.01 | 67.22 (17.96) <.01 | 61.90 (10.64) <.01 | 62.03 (20.94) <.01 |
| b | Var (Slope) | 0.72 (0.26) .01 | 0.69 (0.26) .01 | 0.94 (0.64) .14 | 1.30 (0.67) .05 | 0.87 (1.00) .38 |
| b | Var (Residual) | 20.68 (1.12) <.01 | 20.71 (1.13) <.01 | 20.22 (3.15) <.01 | 18.47 (1.22) <.01 | 20.16 (3.91) <.01 |
| b | Covar (Level, Slope) | -4.01 (1.22) <.01 | -3.88 (1.25) <.01 | -5.78 (3.38) .09 | -4.61 (2.30) .04 | -5.13 (4.17) .22 |
| ab | Covar (Levels) | 41.78 (23.13) .07 | 37.36 (24.52) .13 | 26.83 (43.56) .54 | 44.15 (25.45) .08 | 24.30 (55.17) .66 |
| ab | Covar (Slopes) | 0.60 (0.86) .49 | 0.40 (0.86) .64 | 0.88 (1.49) .56 | 1.74 (1.19) .14 | 1.17 (2.71) .66 |
| ab | Covar (Residuals) | -1.02 (2.86) .72 | -0.95 (2.94) .75 | -0.98 (5.24) .85 | 0.06 (3.21) .98 | -0.92 (8.14) .91 |
|  | Correlation of Levels | 0.273 | 0.248 | 0.218 | 0.3134 | 0.199 |
|  | Correlation of Slopes | 0.447 | 0.335 | 0.601 | 0.7768 | 0.722 |
|  | Correlation of Residuals | -0.025 | -0.023 | -0.026 | 0.0017 | -0.024 |
|  | N | 376 | 376 | 72 | 222 | 72 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -5,609 | -5,608 | -1,916 | -4,491 | -1,911 |
|  | AIC | 11,260 | 11,266 | 3,891 | 9,068 | 3,911 |
|  | BIC | 11,343 | 11,365 | 3,957 | 9,215 | 4,014 |

## digit\_tot

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 108.58 (3.32) <.01 | 105.04 (5.42) <.01 | 101.54 (10.67) <.01 | 111.75 (7.69) <.01 | 107.41 (18.64) <.01 |
| a | Slope | -2.28 (0.69) <.01 | -1.11 (1.19) .35 | 0.19 (3.16) .95 | -3.06 (2.48) .22 | -1.68 (7.17) .81 |
| a | Level \* age | -1.02 (0.38) .01 | -1.00 (0.38) .01 | -0.44 (0.60) .46 | -1.07 (0.42) .01 | -0.49 (0.78) .53 |
| a | Level \* education | --- | 0.48 (0.57) .40 | 0.75 (0.85) .38 | 0.78 (0.67) .24 | 0.81 (1.44) .57 |
| a | Level \* height | --- | --- | 0.12 (0.37) .75 | -0.10 (0.42) .81 | -0.04 (0.50) .93 |
| a | Level \* smoking | --- | --- | --- | -5.57 (4.61) .23 | -1.99 (9.25) .83 |
| a | Level \* cardio | --- | --- | --- | -2.77 (4.61) .55 | -4.29 (12.80) .74 |
| a | Level \* diabetes | --- | --- | --- | -13.17 (5.34) .01 | -5.71 (8.65) .51 |
| a | Slope \* age | -0.10 (0.08) .23 | -0.11 (0.08) .20 | -0.14 (0.19) .48 | -0.11 (0.13) .40 | -0.09 (0.25) .71 |
| a | Slope \* education | --- | -0.15 (0.14) .27 | -0.30 (0.21) .16 | -0.09 (0.21) .66 | -0.35 (0.51) .49 |
| a | Slope \* height | --- | --- | 0.00 (0.13) .98 | 0.02 (0.12) .90 | 0.11 (0.23) .63 |
| a | Slope \* smoking | --- | --- | --- | 2.08 (1.48) .16 | 0.94 (2.94) .75 |
| a | Slope \* cardio | --- | --- | --- | 0.67 (1.21) .58 | 1.48 (3.36) .66 |
| a | Slope \* diabetes | --- | --- | --- | 0.14 (1.49) .93 | 0.84 (3.23) .80 |
| b | Level | 13.75 (0.39) <.01 | 13.74 (0.40) <.01 | 15.57 (1.98) <.01 | 12.06 (1.06) <.01 | 15.09 (3.65) <.01 |
| b | Slope | 0.20 (0.08) .02 | 0.16 (0.11) .12 | -0.34 (0.45) .45 | 0.33 (0.25) .18 | -0.29 (0.62) .64 |
| b | Level \* age | -0.03 (0.04) .50 | -0.03 (0.04) .50 | -0.04 (0.13) .74 | -0.01 (0.06) .85 | -0.03 (0.19) .86 |
| b | Level \* education | --- | 0.00 (0.01) .98 | 0.30 (0.18) .10 | 0.30 (0.08) <.01 | 0.33 (0.27) .22 |
| b | Level \* height | --- | --- | -0.14 (0.07) .04 | -0.14 (0.06) .02 | -0.13 (0.09) .15 |
| b | Level \* smoking | --- | --- | --- | 1.08 (0.72) .14 | 0.96 (2.02) .63 |
| b | Level \* cardio | --- | --- | --- | -0.93 (0.51) .07 | 0.62 (1.45) .67 |
| b | Level \* diabetes | --- | --- | --- | -1.22 (0.70) .08 | -0.92 (1.73) .60 |
| b | Slope \* age | -0.00 (0.01) .61 | -0.00 (0.01) .62 | 0.01 (0.03) .64 | -0.01 (0.01) .67 | 0.01 (0.04) .73 |
| b | Slope \* education | --- | 0.00 (0.01) .66 | -0.00 (0.03) .98 | -0.01 (0.02) .67 | 0.00 (0.04) .99 |
| b | Slope \* height | --- | --- | 0.01 (0.02) .57 | 0.01 (0.02) .67 | 0.00 (0.03) .90 |
| b | Slope \* smoking | --- | --- | --- | -0.16 (0.15) .29 | -0.11 (0.29) .71 |
| b | Slope \* cardio | --- | --- | --- | 0.18 (0.11) .09 | 0.05 (0.49) .92 |
| b | Slope \* diabetes | --- | --- | --- | 0.05 (0.16) .74 | -0.06 (0.43) .89 |
| a | Var (Level) | 328.54 (58.53) <.01 | 322.92 (60.27) <.01 | 232.37 (94.46) .01 | 310.85 (74.16) <.01 | 236.19 (149.35) .11 |
| a | Var (Slope) | 2.10 (1.38) .13 | 1.74 (1.40) .21 | 2.59 (4.94) .60 | 3.15 (4.27) .46 | 2.55 (9.68) .79 |
| a | Var (Residual) | 79.83 (7.08) <.01 | 80.45 (7.29) <.01 | 71.46 (13.35) <.01 | 76.25 (8.50) <.01 | 71.94 (28.08) .01 |
| a | Covar (Level, Slope) | 5.03 (10.18) .62 | 6.00 (10.17) .56 | -4.45 (21.17) .83 | -0.05 (17.84) .99 | -9.90 (39.83) .80 |
| b | Var (Level) | 12.47 (1.28) <.01 | 12.47 (1.30) <.01 | 10.76 (3.39) <.01 | 10.42 (1.91) <.01 | 10.32 (4.40) .02 |
| b | Var (Slope) | 0.02 (0.02) .37 | 0.02 (0.03) .36 | 0.05 (0.06) .38 | 0.06 (0.07) .37 | 0.04 (0.10) .66 |
| b | Var (Residual) | 3.10 (0.17) <.01 | 3.09 (0.17) <.01 | 2.60 (0.28) <.01 | 3.12 (0.23) <.01 | 2.58 (0.33) <.01 |
| b | Covar (Level, Slope) | -0.34 (0.19) .08 | -0.36 (0.20) .07 | -0.48 (0.52) .35 | -0.52 (0.38) .17 | -0.48 (0.79) .54 |
| ab | Covar (Levels) | 19.23 (8.80) .03 | 17.59 (8.78) .04 | 5.32 (16.39) .75 | 9.48 (9.98) .34 | 0.84 (19.90) .97 |
| ab | Covar (Slopes) | 0.04 (0.13) .77 | 0.02 (0.14) .91 | 0.29 (0.43) .51 | 0.18 (0.40) .66 | 0.23 (0.55) .67 |
| ab | Covar (Residuals) | -0.22 (1.19) .86 | -0.24 (1.21) .84 | 0.04 (2.04) .98 | -0.86 (1.49) .56 | -0.08 (2.88) .98 |
|  | Correlation of Levels | 0.301 | 0.277 | 0.1064 | 0.167 | 0.0171 |
|  | Correlation of Slopes | 0.177 | 0.078 | 0.7892 | 0.394 | 0.6795 |
|  | Correlation of Residuals | -0.014 | -0.015 | 0.0033 | -0.056 | -0.0062 |
|  | N | 379 | 379 | 72 | 222 | 72 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -4,579 | -4,577 | -1,579 | -3,762 | -1,572 |
|  | AIC | 9,199 | 9,204 | 3,216 | 7,609 | 3,235 |
|  | BIC | 9,282 | 9,302 | 3,282 | 7,756 | 3,337 |

## fas

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 108.36 (3.17) <.01 | 107.08 (5.22) <.01 | 102.31 (10.28) <.01 | 112.02 (7.70) <.01 | 107.87 (17.89) <.01 |
| a | Slope | -2.14 (0.73) <.01 | -1.34 (1.12) .23 | -0.19 (2.92) .95 | -2.61 (2.29) .26 | -1.79 (7.08) .80 |
| a | Level \* age | -0.98 (0.34) <.01 | -0.98 (0.34) <.01 | -0.43 (0.50) .40 | -1.06 (0.40) .01 | -0.47 (0.68) .49 |
| a | Level \* education | --- | 0.17 (0.56) .76 | 0.64 (0.78) .41 | 0.71 (0.70) .31 | 0.72 (1.17) .54 |
| a | Level \* height | --- | --- | 0.11 (0.38) .78 | -0.07 (0.42) .86 | -0.08 (0.48) .87 |
| a | Level \* smoking | --- | --- | --- | -5.42 (4.52) .23 | -1.77 (9.48) .85 |
| a | Level \* cardio | --- | --- | --- | -2.52 (4.57) .58 | -4.54 (11.48) .69 |
| a | Level \* diabetes | --- | --- | --- | -12.62 (5.35) .02 | -5.52 (8.98) .54 |
| a | Slope \* age | -0.12 (0.08) .17 | -0.12 (0.08) .15 | -0.14 (0.16) .37 | -0.13 (0.13) .32 | -0.10 (0.23) .66 |
| a | Slope \* education | --- | -0.11 (0.13) .41 | -0.24 (0.19) .21 | -0.11 (0.19) .58 | -0.31 (0.36) .40 |
| a | Slope \* height | --- | --- | 0.00 (0.12) .99 | 0.04 (0.14) .78 | 0.13 (0.18) .48 |
| a | Slope \* smoking | --- | --- | --- | 1.67 (1.38) .22 | 0.75 (2.48) .76 |
| a | Slope \* cardio | --- | --- | --- | 0.60 (1.18) .61 | 1.66 (2.56) .52 |
| a | Slope \* diabetes | --- | --- | --- | 0.11 (1.45) .94 | 0.70 (3.33) .83 |
| b | Level | 31.26 (1.46) <.01 | 31.27 (1.51) <.01 | 29.58 (6.51) <.01 | 20.25 (3.84) <.01 | 31.34 (8.03) <.01 |
| b | Slope | 0.33 (0.26) .20 | 0.26 (0.41) .53 | 1.42 (1.01) .16 | 1.69 (0.76) .03 | 1.22 (1.31) .35 |
| b | Level \* age | 0.19 (0.15) .18 | 0.19 (0.15) .19 | -0.04 (0.40) .93 | 0.29 (0.20) .14 | -0.05 (0.42) .91 |
| b | Level \* education | --- | -0.00 (0.05) .95 | 1.53 (0.61) .01 | 1.66 (0.32) <.01 | 1.58 (0.86) .07 |
| b | Level \* height | --- | --- | -0.34 (0.26) .20 | -0.39 (0.27) .15 | -0.31 (0.44) .48 |
| b | Level \* smoking | --- | --- | --- | 3.92 (2.21) .08 | 0.55 (4.46) .90 |
| b | Level \* cardio | --- | --- | --- | -1.09 (1.69) .52 | 1.64 (7.88) .83 |
| b | Level \* diabetes | --- | --- | --- | -5.69 (2.31) .01 | -5.35 (4.88) .27 |
| b | Slope \* age | -0.02 (0.03) .47 | -0.02 (0.03) .48 | -0.02 (0.05) .69 | -0.05 (0.04) .21 | -0.01 (0.10) .88 |
| b | Slope \* education | --- | 0.01 (0.05) .83 | -0.14 (0.12) .26 | -0.11 (0.07) .12 | -0.13 (0.14) .33 |
| b | Slope \* height | --- | --- | 0.00 (0.05) .98 | 0.04 (0.07) .56 | -0.01 (0.08) .94 |
| b | Slope \* smoking | --- | --- | --- | -0.41 (0.46) .38 | 0.29 (0.76) .70 |
| b | Slope \* cardio | --- | --- | --- | 0.50 (0.48) .30 | -0.56 (1.67) .74 |
| b | Slope \* diabetes | --- | --- | --- | -0.48 (0.56) .40 | 0.00 (0.95) .99 |
| a | Var (Level) | 318.56 (55.81) <.01 | 317.26 (57.69) <.01 | 201.58 (87.47) .02 | 307.21 (71.00) <.01 | 219.15 (134.09) .10 |
| a | Var (Slope) | 2.18 (1.43) .13 | 1.94 (1.43) .17 | 0.78 (3.06) .80 | 2.98 (3.86) .44 | 0.96 (6.22) .88 |
| a | Var (Residual) | 79.81 (7.05) <.01 | 80.07 (7.30) <.01 | 75.54 (14.82) <.01 | 76.72 (8.54) <.01 | 75.31 (18.91) <.01 |
| a | Covar (Level, Slope) | 6.56 (9.45) .49 | 6.93 (9.53) .47 | 5.18 (15.85) .74 | 0.59 (15.61) .97 | -4.11 (30.44) .89 |
| b | Var (Level) | 137.54 (14.08) <.01 | 137.79 (14.30) <.01 | 102.61 (30.46) <.01 | 101.35 (20.05) <.01 | 94.26 (31.75) <.01 |
| b | Var (Slope) | 0.51 (0.34) .14 | 0.52 (0.37) .16 | 0.57 (0.65) .38 | 0.72 (1.04) .49 | 0.54 (0.79) .49 |
| b | Var (Residual) | 29.60 (1.57) <.01 | 29.59 (1.62) <.01 | 24.82 (2.96) <.01 | 30.02 (2.68) <.01 | 24.81 (4.33) <.01 |
| b | Covar (Level, Slope) | -1.84 (2.18) .40 | -2.01 (2.34) .39 | 0.34 (4.58) .94 | -0.41 (4.07) .92 | 0.21 (5.26) .97 |
| ab | Covar (Levels) | 62.42 (25.06) .01 | 59.80 (25.70) .02 | -5.51 (32.70) .87 | 26.13 (28.93) .37 | -14.24 (49.10) .77 |
| ab | Covar (Slopes) | 0.83 (0.85) .33 | 0.74 (0.84) .38 | 0.23 (1.36) .87 | 0.81 (1.55) .60 | 0.48 (1.83) .79 |
| ab | Covar (Residuals) | 1.75 (3.41) .61 | 1.55 (3.44) .65 | -0.24 (7.35) .97 | 0.86 (4.62) .85 | -0.19 (11.00) .99 |
|  | Correlation of Levels | 0.298 | 0.286 | -0.0383 | 0.148 | -0.0991 |
|  | Correlation of Slopes | 0.784 | 0.741 | 0.3426 | 0.554 | 0.6628 |
|  | Correlation of Residuals | 0.036 | 0.032 | -0.0056 | 0.018 | -0.0043 |
|  | N | 358 | 358 | 72 | 222 | 72 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -5,704 | -5,703 | -1,980 | -4,597 | -1,973 |
|  | AIC | 11,450 | 11,457 | 4,018 | 9,281 | 4,035 |
|  | BIC | 11,532 | 11,554 | 4,084 | 9,427 | 4,138 |

## information

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | full |
| a | Level | 109.34 (3.26) <.01 | 105.88 (5.70) <.01 | 100.72 (10.57) <.01 | 105.81 (19.36) <.01 |
| a | Slope | -2.24 (0.73) <.01 | -1.50 (1.14) .19 | 0.55 (3.06) .86 | -0.75 (6.82) .91 |
| a | Level \* age | -0.96 (0.36) .01 | -0.96 (0.35) .01 | -0.44 (0.56) .43 | -0.48 (0.85) .57 |
| a | Level \* education | --- | 0.50 (0.64) .43 | 0.81 (0.77) .29 | 0.83 (1.42) .56 |
| a | Level \* height | --- | --- | 0.15 (0.39) .71 | 0.04 (0.47) .94 |
| a | Level \* smoking | --- | --- | --- | -1.36 (8.68) .88 |
| a | Level \* cardio | --- | --- | --- | -3.98 (16.28) .81 |
| a | Level \* diabetes | --- | --- | --- | -5.68 (10.25) .58 |
| a | Slope \* age | -0.12 (0.08) .14 | -0.12 (0.08) .13 | -0.13 (0.18) .46 | -0.11 (0.37) .78 |
| a | Slope \* education | --- | -0.10 (0.14) .44 | -0.32 (0.21) .12 | -0.35 (0.49) .47 |
| a | Slope \* height | --- | --- | -0.02 (0.11) .88 | 0.06 (0.18) .73 |
| a | Slope \* smoking | --- | --- | --- | 0.52 (3.15) .87 |
| a | Slope \* cardio | --- | --- | --- | 1.34 (6.50) .84 |
| a | Slope \* diabetes | --- | --- | --- | 0.85 (4.48) .85 |
| b | Level | 22.63 (0.52) <.01 | 23.32 (0.57) <.01 | 17.89 (2.76) <.01 | 18.02 (4.76) <.01 |
| b | Slope | -0.65 (0.18) <.01 | -1.34 (0.25) <.01 | -0.74 (0.78) .34 | -0.55 (1.22) .65 |
| b | Level \* age | 0.00 (0.05) .92 | 0.00 (0.05) .95 | -0.08 (0.16) .63 | -0.06 (0.27) .83 |
| b | Level \* education | --- | -0.10 (0.03) <.01 | 0.66 (0.26) .01 | 0.67 (0.37) .07 |
| b | Level \* height | --- | --- | -0.05 (0.13) .71 | -0.06 (0.20) .76 |
| b | Level \* smoking | --- | --- | --- | -0.10 (1.93) .96 |
| b | Level \* cardio | --- | --- | --- | -1.35 (3.14) .67 |
| b | Level \* diabetes | --- | --- | --- | -1.66 (2.87) .56 |
| b | Slope \* age | 0.00 (0.02) .92 | 0.00 (0.02) .82 | 0.01 (0.05) .82 | 0.01 (0.06) .92 |
| b | Slope \* education | --- | 0.10 (0.03) <.01 | 0.05 (0.07) .53 | 0.04 (0.15) .79 |
| b | Slope \* height | --- | --- | 0.01 (0.04) .83 | 0.01 (0.07) .84 |
| b | Slope \* smoking | --- | --- | --- | 0.04 (0.62) .95 |
| b | Slope \* cardio | --- | --- | --- | -0.07 (0.75) .93 |
| b | Slope \* diabetes | --- | --- | --- | 0.01 (0.82) .99 |
| a | Var (Level) | 314.38 (55.96) <.01 | 306.55 (57.39) <.01 | 235.49 (109.20) .03 | 232.37 (162.41) .15 |
| a | Var (Slope) | 1.74 (1.47) .24 | 1.38 (1.44) .34 | 1.68 (4.61) .72 | 1.36 (7.17) .85 |
| a | Var (Residual) | 80.03 (7.08) <.01 | 80.74 (7.20) <.01 | 73.45 (17.05) <.01 | 74.60 (20.77) <.01 |
| a | Covar (Level, Slope) | 8.24 (9.43) .38 | 9.87 (9.79) .31 | -4.59 (19.48) .81 | -7.29 (32.24) .82 |
| b | Var (Level) | 18.08 (2.40) <.01 | 19.18 (2.52) <.01 | 6.08 (4.05) .13 | 5.33 (5.43) .33 |
| b | Var (Slope) | 0.22 (0.09) .02 | 0.21 (0.08) .01 | 0.02 (0.27) .94 | 0.02 (0.32) .96 |
| b | Var (Residual) | 6.70 (0.28) <.01 | 6.81 (0.28) <.01 | 5.22 (0.68) <.01 | 5.19 (1.13) <.01 |
| b | Covar (Level, Slope) | -0.17 (0.39) .67 | -0.82 (0.42) .05 | 0.17 (0.81) .83 | 0.15 (1.14) .89 |
| ab | Covar (Levels) | 11.89 (12.60) .34 | 9.02 (14.30) .53 | 17.16 (14.71) .24 | 16.55 (22.62) .46 |
| ab | Covar (Slopes) | 0.44 (0.44) .32 | 0.46 (0.44) .30 | -0.03 (0.74) .97 | -0.03 (1.58) .98 |
| ab | Covar (Residuals) | -3.06 (1.55) .05 | -3.08 (1.64) .06 | 0.38 (2.40) .88 | 0.52 (4.72) .91 |
|  | Correlation of Levels | 0.16 | 0.12 | 0.454 | 0.470 |
|  | Correlation of Slopes | 0.70 | 0.86 | -0.161 | -0.217 |
|  | Correlation of Residuals | -0.13 | -0.13 | 0.019 | 0.026 |
|  | N | 352 | 352 | 70 | 70 |
|  | occasions | 7 | 7 | 7 | 7 |
|  | parameters | 21 | 25 | 29 | 45 |
|  | LL | -4,513 | -4,503 | -1,401 | -1,396 |
|  | AIC | 9,067 | 9,055 | 2,860 | 2,882 |
|  | BIC | 9,148 | 9,152 | 2,925 | 2,983 |

## logic\_tot

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 109.18 (3.38) <.01 | 105.83 (5.82) <.01 | 102.84 (10.12) <.01 | 111.62 (7.69) <.01 | 107.93 (16.43) <.01 |
| a | Slope | -2.20 (0.73) <.01 | -1.27 (1.25) .31 | -0.50 (3.07) .87 | -2.65 (2.48) .29 | -1.72 (6.01) .78 |
| a | Level \* age | -1.06 (0.37) <.01 | -1.06 (0.37) <.01 | -0.43 (0.49) .37 | -1.07 (0.41) .01 | -0.46 (0.65) .48 |
| a | Level \* education | --- | 0.48 (0.62) .44 | 0.65 (0.72) .37 | 0.79 (0.65) .23 | 0.68 (0.94) .47 |
| a | Level \* height | --- | --- | 0.09 (0.35) .80 | 0.10 (0.41) .81 | -0.01 (0.45) .97 |
| a | Level \* smoking | --- | --- | --- | -5.74 (4.62) .21 | -1.40 (8.91) .88 |
| a | Level \* cardio | --- | --- | --- | -2.45 (4.78) .61 | -4.18 (13.22) .75 |
| a | Level \* diabetes | --- | --- | --- | -13.49 (5.41) .01 | -4.99 (9.93) .61 |
| a | Slope \* age | -0.11 (0.08) .19 | -0.11 (0.08) .19 | -0.13 (0.15) .38 | -0.13 (0.12) .30 | -0.12 (0.27) .67 |
| a | Slope \* education | --- | -0.14 (0.14) .34 | -0.26 (0.17) .13 | -0.10 (0.19) .61 | -0.28 (0.31) .36 |
| a | Slope \* height | --- | --- | 0.02 (0.11) .88 | 0.01 (0.12) .94 | 0.09 (0.18) .61 |
| a | Slope \* smoking | --- | --- | --- | 1.75 (1.44) .22 | 0.47 (3.09) .88 |
| a | Slope \* cardio | --- | --- | --- | 0.60 (1.16) .60 | 1.47 (3.39) .66 |
| a | Slope \* diabetes | --- | --- | --- | 0.05 (1.54) .98 | 0.57 (3.71) .88 |
| b | Level | 20.81 (0.78) <.01 | 20.36 (0.82) <.01 | 15.12 (3.55) <.01 | 13.84 (2.00) <.01 | 14.14 (5.29) .01 |
| b | Slope | 0.62 (0.24) .01 | 1.07 (0.31) <.01 | 1.77 (0.84) .04 | 1.84 (0.62) <.01 | 1.81 (1.15) .11 |
| b | Level \* age | -0.12 (0.08) .13 | -0.12 (0.08) .12 | -0.11 (0.20) .59 | 0.03 (0.11) .80 | -0.11 (0.28) .70 |
| b | Level \* education | --- | 0.07 (0.03) .04 | 0.84 (0.26) <.01 | 0.85 (0.15) <.01 | 0.87 (0.34) .01 |
| b | Level \* height | --- | --- | 0.10 (0.12) .41 | 0.09 (0.13) .48 | 0.09 (0.17) .60 |
| b | Level \* smoking | --- | --- | --- | 1.68 (1.34) .21 | 0.15 (3.15) .96 |
| b | Level \* cardio | --- | --- | --- | 0.08 (0.88) .93 | 1.26 (2.99) .67 |
| b | Level \* diabetes | --- | --- | --- | -0.92 (1.26) .46 | 1.28 (2.69) .64 |
| b | Slope \* age | -0.08 (0.02) <.01 | -0.08 (0.02) <.01 | -0.08 (0.05) .10 | -0.11 (0.04) .01 | -0.08 (0.07) .24 |
| b | Slope \* education | --- | -0.07 (0.03) .02 | -0.12 (0.06) .04 | -0.13 (0.05) .01 | -0.13 (0.08) .11 |
| b | Slope \* height | --- | --- | -0.02 (0.03) .56 | -0.01 (0.04) .76 | -0.02 (0.04) .69 |
| b | Slope \* smoking | --- | --- | --- | -0.32 (0.36) .38 | -0.09 (0.62) .88 |
| b | Slope \* cardio | --- | --- | --- | -0.14 (0.32) .66 | -0.60 (0.96) .53 |
| b | Slope \* diabetes | --- | --- | --- | 0.62 (0.47) .18 | 0.57 (0.68) .40 |
| a | Var (Level) | 325.84 (60.68) <.01 | 316.82 (61.41) <.01 | 217.72 (85.76) .01 | 306.88 (78.92) <.01 | 217.58 (146.35) .14 |
| a | Var (Slope) | 1.97 (1.46) .18 | 1.55 (1.37) .26 | 1.73 (5.26) .74 | 2.22 (3.61) .54 | 1.33 (7.04) .85 |
| a | Var (Residual) | 80.09 (7.27) <.01 | 80.78 (7.40) <.01 | 73.64 (13.71) <.01 | 77.73 (8.57) <.01 | 74.02 (24.27) <.01 |
| a | Covar (Level, Slope) | 6.32 (10.65) .55 | 8.33 (10.56) .43 | -0.52 (18.26) .98 | 2.85 (15.71) .86 | -3.66 (25.45) .89 |
| b | Var (Level) | 37.16 (4.85) <.01 | 35.68 (4.76) <.01 | 26.50 (9.86) .01 | 30.12 (6.59) <.01 | 25.43 (13.30) .06 |
| b | Var (Slope) | 0.38 (0.17) .03 | 0.27 (0.17) .11 | 0.17 (0.32) .60 | 0.57 (0.37) .12 | 0.10 (0.42) .81 |
| b | Var (Residual) | 14.56 (0.86) <.01 | 14.57 (0.87) <.01 | 14.66 (2.09) <.01 | 14.08 (1.02) <.01 | 14.47 (2.83) <.01 |
| b | Covar (Level, Slope) | -1.09 (0.99) .27 | -0.37 (0.99) .71 | -0.52 (1.45) .72 | -0.79 (1.57) .61 | -0.41 (2.07) .84 |
| ab | Covar (Levels) | 27.70 (15.75) .08 | 22.03 (16.43) .18 | 14.39 (23.05) .53 | 20.53 (18.13) .26 | 12.59 (30.73) .68 |
| ab | Covar (Slopes) | 0.00 (0.50) .99 | -0.16 (0.46) .72 | 0.11 (0.68) .87 | 0.10 (0.82) .90 | 0.22 (1.14) .85 |
| ab | Covar (Residuals) | -0.82 (2.58) .75 | -0.59 (2.67) .82 | -0.55 (4.41) .90 | -0.92 (3.23) .78 | -0.89 (7.99) .91 |
|  | Correlation of Levels | 0.2518 | 0.207 | 0.189 | 0.214 | 0.169 |
|  | Correlation of Slopes | 0.0035 | -0.250 | 0.199 | 0.093 | 0.603 |
|  | Correlation of Residuals | -0.0240 | -0.017 | -0.017 | -0.028 | -0.027 |
|  | N | 350 | 350 | 72 | 218 | 72 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -5,116 | -5,112 | -1,854 | -4,177 | -1,846 |
|  | AIC | 10,274 | 10,275 | 3,765 | 8,439 | 3,782 |
|  | BIC | 10,355 | 10,371 | 3,831 | 8,585 | 3,884 |

## mmse

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | full |
| a | Level | 107.70 (3.41) <.01 | 107.67 (5.57) <.01 | 101.63 (11.25) <.01 | 107.27 (14.30) <.01 |
| a | Slope | -2.27 (0.73) <.01 | -2.22 (1.14) .05 | 0.06 (2.91) .98 | -1.37 (7.00) .84 |
| a | Level \* age | -1.05 (0.37) <.01 | -1.05 (0.38) <.01 | -0.43 (0.48) .37 | -0.48 (0.56) .39 |
| a | Level \* education | --- | 0.01 (0.61) .99 | 0.70 (0.83) .40 | 0.70 (1.00) .48 |
| a | Level \* height | --- | --- | 0.13 (0.42) .75 | -0.02 (0.49) .97 |
| a | Level \* smoking | --- | --- | --- | -1.24 (7.55) .87 |
| a | Level \* cardio | --- | --- | --- | -4.62 (15.53) .77 |
| a | Level \* diabetes | --- | --- | --- | -5.41 (9.03) .55 |
| a | Slope \* age | -0.12 (0.09) .18 | -0.12 (0.09) .18 | -0.14 (0.16) .36 | -0.11 (0.22) .62 |
| a | Slope \* education | --- | -0.01 (0.15) .97 | -0.27 (0.19) .15 | -0.29 (0.37) .43 |
| a | Slope \* height | --- | --- | -0.00 (0.13) .98 | 0.10 (0.21) .65 |
| a | Slope \* smoking | --- | --- | --- | 0.37 (3.12) .91 |
| a | Slope \* cardio | --- | --- | --- | 1.73 (4.58) .71 |
| a | Slope \* diabetes | --- | --- | --- | 0.82 (3.58) .82 |
| b | Level | 26.19 (0.19) <.01 | 26.22 (0.19) <.01 | 26.45 (0.64) <.01 | 26.90 (1.11) <.01 |
| b | Slope | 0.09 (0.05) .06 | 0.10 (0.06) .12 | 0.01 (0.21) .97 | -0.05 (0.34) .89 |
| b | Level \* age | -0.00 (0.02) .96 | -0.00 (0.02) .94 | 0.00 (0.04) .93 | -0.00 (0.04) .92 |
| b | Level \* education | --- | -0.00 (0.01) .72 | 0.06 (0.05) .19 | 0.06 (0.06) .31 |
| b | Level \* height | --- | --- | 0.00 (0.03) .94 | 0.00 (0.04) .99 |
| b | Level \* smoking | --- | --- | --- | -0.30 (0.44) .49 |
| b | Level \* cardio | --- | --- | --- | 0.14 (0.66) .84 |
| b | Level \* diabetes | --- | --- | --- | -0.02 (0.46) .96 |
| b | Slope \* age | -0.01 (0.00) .01 | -0.01 (0.00) .01 | -0.00 (0.01) .73 | -0.00 (0.02) .85 |
| b | Slope \* education | --- | 0.00 (0.00) .95 | 0.00 (0.01) .88 | 0.00 (0.02) .91 |
| b | Slope \* height | --- | --- | -0.00 (0.01) .89 | 0.00 (0.02) .99 |
| b | Slope \* smoking | --- | --- | --- | 0.06 (0.14) .68 |
| b | Slope \* cardio | --- | --- | --- | -0.03 (0.31) .92 |
| b | Slope \* diabetes | --- | --- | --- | 0.04 (0.15) .80 |
| a | Var (Level) | 346.18 (71.14) <.01 | 344.95 (75.81) <.01 | 216.47 (89.94) .02 | 214.50 (129.55) .10 |
| a | Var (Slope) | 2.20 (1.37) .11 | 2.14 (1.43) .14 | 1.76 (3.77) .64 | 0.78 (5.83) .89 |
| a | Var (Residual) | 79.59 (7.08) <.01 | 79.70 (7.19) <.01 | 73.08 (15.30) <.01 | 75.51 (24.81) <.01 |
| a | Covar (Level, Slope) | 6.45 (11.63) .58 | 6.62 (12.38) .59 | 0.74 (17.23) .97 | -2.20 (20.57) .92 |
| b | Var (Level) | 1.79 (0.22) <.01 | 1.76 (0.22) <.01 | 0.30 (0.26) .26 | 0.27 (0.36) .46 |
| b | Var (Slope) | 0.00 (0.01) .51 | 0.00 (0.01) .57 | 0.01 (0.02) .72 | 0.01 (0.02) .76 |
| b | Var (Residual) | 0.98 (0.04) <.01 | 0.98 (0.04) <.01 | 0.67 (0.07) <.01 | 0.66 (0.08) <.01 |
| b | Covar (Level, Slope) | -0.01 (0.04) .77 | -0.01 (0.04) .85 | 0.04 (0.07) .57 | 0.04 (0.07) .60 |
| ab | Covar (Levels) | 10.51 (5.53) .06 | 10.38 (5.74) .07 | 2.34 (3.90) .55 | 1.71 (5.92) .77 |
| ab | Covar (Slopes) | -0.00 (0.12) .98 | -0.00 (0.12) .99 | 0.01 (0.18) .95 | 0.03 (0.30) .93 |
| ab | Covar (Residuals) | 0.08 (0.69) .91 | 0.07 (0.69) .92 | 0.21 (1.05) .84 | 0.24 (1.42) .86 |
|  | Correlation of Levels | 0.4217 | 0.4212 | 0.29 | 0.224 |
|  | Correlation of Slopes | -0.0213 | -0.0250 | 0.11 | 0.410 |
|  | Correlation of Residuals | 0.0089 | 0.0084 | 0.03 | 0.034 |
|  | N | 383 | 383 | 72 | 72 |
|  | occasions | 8 | 8 | 8 | 8 |
|  | parameters | 21 | 25 | 29 | 45 |
|  | LL | -3,874 | -3,872 | -1,317 | -1,312 |
|  | AIC | 7,790 | 7,793 | 2,691 | 2,713 |
|  | BIC | 7,872 | 7,892 | 2,757 | 2,816 |

## symbol

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 106.89 (3.20) <.01 | 108.32 (5.40) <.01 | 102.19 (10.52) <.01 | 109.28 (7.57) <.01 | 108.10 (22.36) <.01 |
| a | Slope | -2.11 (0.72) <.01 | -1.26 (1.22) .30 | -0.15 (3.15) .96 | -2.83 (2.30) .22 | -1.74 (8.13) .83 |
| a | Level \* age | -1.02 (0.35) <.01 | -1.03 (0.35) <.01 | -0.42 (0.54) .43 | -1.08 (0.41) .01 | -0.48 (0.88) .58 |
| a | Level \* education | --- | -0.21 (0.61) .73 | 0.64 (0.81) .43 | 0.90 (0.65) .17 | 0.68 (1.19) .57 |
| a | Level \* height | --- | --- | 0.10 (0.38) .80 | 0.13 (0.43) .76 | -0.09 (0.48) .85 |
| a | Level \* smoking | --- | --- | --- | -4.76 (4.57) .30 | -1.61 (10.57) .88 |
| a | Level \* cardio | --- | --- | --- | -2.36 (4.83) .62 | -4.37 (13.74) .75 |
| a | Level \* diabetes | --- | --- | --- | -12.37 (5.47) .02 | -5.31 (9.88) .59 |
| a | Slope \* age | -0.12 (0.08) .16 | -0.12 (0.08) .14 | -0.15 (0.18) .40 | -0.14 (0.12) .28 | -0.11 (0.30) .72 |
| a | Slope \* education | --- | -0.12 (0.14) .40 | -0.23 (0.19) .22 | -0.07 (0.19) .70 | -0.27 (0.34) .43 |
| a | Slope \* height | --- | --- | 0.01 (0.11) .90 | 0.01 (0.13) .93 | 0.14 (0.16) .41 |
| a | Slope \* smoking | --- | --- | --- | 1.86 (1.33) .16 | 0.52 (2.82) .85 |
| a | Slope \* cardio | --- | --- | --- | 0.55 (1.24) .65 | 1.47 (3.64) .69 |
| a | Slope \* diabetes | --- | --- | --- | -0.07 (1.52) .96 | 0.84 (2.70) .76 |
| b | Level | 39.39 (1.32) <.01 | 38.97 (1.43) <.01 | 37.41 (6.23) <.01 | 32.41 (3.03) <.01 | 38.74 (14.00) .01 |
| b | Slope | 0.52 (0.36) .14 | 1.01 (0.59) .09 | 0.87 (2.12) .68 | 0.82 (0.81) .31 | 0.64 (2.93) .82 |
| b | Level \* age | -0.29 (0.14) .04 | -0.29 (0.14) .04 | -0.14 (0.32) .66 | -0.22 (0.16) .16 | -0.12 (0.43) .78 |
| b | Level \* education | --- | 0.06 (0.07) .37 | 1.33 (0.61) .03 | 1.51 (0.27) <.01 | 1.29 (0.97) .18 |
| b | Level \* height | --- | --- | 0.12 (0.31) .70 | 0.07 (0.32) .83 | 0.13 (0.35) .72 |
| b | Level \* smoking | --- | --- | --- | -0.85 (2.01) .67 | 0.53 (6.25) .93 |
| b | Level \* cardio | --- | --- | --- | -2.69 (1.53) .08 | -4.88 (6.80) .47 |
| b | Level \* diabetes | --- | --- | --- | -3.62 (2.23) .10 | -4.68 (5.00) .35 |
| b | Slope \* age | -0.06 (0.04) .10 | -0.06 (0.04) .08 | -0.04 (0.10) .66 | -0.07 (0.05) .12 | -0.04 (0.14) .76 |
| b | Slope \* education | --- | -0.07 (0.07) .29 | -0.17 (0.16) .31 | -0.01 (0.08) .84 | -0.16 (0.19) .41 |
| b | Slope \* height | --- | --- | -0.00 (0.07) .96 | 0.02 (0.08) .78 | -0.00 (0.09) .96 |
| b | Slope \* smoking | --- | --- | --- | 0.09 (0.50) .85 | -0.11 (1.23) .93 |
| b | Slope \* cardio | --- | --- | --- | 0.14 (0.52) .79 | 0.56 (1.66) .74 |
| b | Slope \* diabetes | --- | --- | --- | 0.55 (0.57) .33 | 0.36 (1.04) .73 |
| a | Var (Level) | 337.62 (62.10) <.01 | 340.56 (64.36) <.01 | 220.38 (103.56) .03 | 316.10 (77.45) <.01 | 223.93 (139.75) .11 |
| a | Var (Slope) | 2.02 (1.44) .16 | 1.64 (1.43) .25 | 2.52 (4.61) .58 | 3.03 (4.45) .50 | 2.10 (5.57) .71 |
| a | Var (Residual) | 79.70 (7.10) <.01 | 80.32 (7.32) <.01 | 71.86 (14.89) <.01 | 76.20 (8.58) <.01 | 73.44 (24.11) <.01 |
| a | Covar (Level, Slope) | 5.89 (10.29) .57 | 7.43 (10.47) .48 | -0.05 (18.58) .99 | 1.04 (16.93) .95 | -4.76 (26.20) .86 |
| b | Var (Level) | 154.15 (16.56) <.01 | 151.78 (16.65) <.01 | 78.73 (31.35) .01 | 100.16 (16.59) <.01 | 71.17 (43.19) .10 |
| b | Var (Slope) | 1.49 (0.38) <.01 | 1.30 (0.36) <.01 | 1.25 (0.65) .06 | 1.87 (0.97) .05 | 1.15 (0.98) .24 |
| b | Var (Residual) | 28.85 (1.38) <.01 | 28.95 (1.39) <.01 | 25.48 (2.45) <.01 | 28.32 (1.72) <.01 | 25.51 (4.78) <.01 |
| b | Covar (Level, Slope) | -3.04 (2.47) .22 | -1.71 (2.77) .54 | -0.29 (3.73) .94 | 0.23 (3.17) .94 | 0.50 (7.36) .95 |
| ab | Covar (Levels) | 107.00 (25.80) <.01 | 111.47 (29.58) <.01 | 10.45 (35.04) .77 | 68.90 (26.04) .01 | -4.18 (43.30) .92 |
| ab | Covar (Slopes) | 0.56 (0.79) .48 | 0.34 (0.79) .67 | 1.49 (1.62) .36 | 1.59 (1.33) .23 | 1.14 (2.46) .64 |
| ab | Covar (Residuals) | 1.94 (2.77) .48 | 2.07 (2.94) .48 | -2.39 (7.18) .74 | -0.48 (4.28) .91 | -1.34 (10.16) .90 |
|  | Correlation of Levels | 0.47 | 0.490 | 0.079 | 0.39 | -0.033 |
|  | Correlation of Slopes | 0.32 | 0.231 | 0.843 | 0.67 | 0.733 |
|  | Correlation of Residuals | 0.04 | 0.043 | -0.056 | -0.01 | -0.031 |
|  | N | 377 | 377 | 72 | 221 | 72 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -5,882 | -5,880 | -1,978 | -4,663 | -1,972 |
|  | AIC | 11,806 | 11,810 | 4,014 | 9,412 | 4,034 |
|  | BIC | 11,888 | 11,908 | 4,080 | 9,558 | 4,136 |

## trailsb

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 107.45 (3.34) <.01 | 107.57 (5.74) <.01 | 102.33 (10.98) <.01 | 106.98 (17.01) <.01 | 108.44 (18.76) <.01 |
| a | Slope | -2.05 (0.83) .01 | -2.04 (1.27) .11 | 0.03 (3.25) .99 | 111.58 (7.91) <.01 | -1.93 (5.59) .73 |
| a | Level \* age | -0.93 (0.35) .01 | -0.92 (0.36) .01 | -0.41 (0.52) .43 | -2.18 (5.62) .70 | -0.47 (0.74) .52 |
| a | Level \* education | --- | -0.02 (0.62) .98 | 0.65 (0.73) .38 | -3.01 (2.47) .22 | 0.71 (1.30) .59 |
| a | Level \* height | --- | --- | 0.10 (0.42) .80 | -0.44 (0.64) .49 | -0.05 (0.62) .94 |
| a | Level \* smoking | --- | --- | --- | -1.00 (0.43) .02 | -2.54 (11.81) .83 |
| a | Level \* cardio | --- | --- | --- | 0.64 (1.31) .62 | -3.86 (14.41) .79 |
| a | Level \* diabetes | --- | --- | --- | 0.66 (0.65) .31 | -5.16 (9.65) .59 |
| a | Slope \* age | -0.11 (0.09) .22 | -0.11 (0.09) .24 | -0.16 (0.17) .33 | 0.04 (0.60) .94 | -0.12 (0.26) .66 |
| a | Slope \* education | --- | 0.00 (0.14) .99 | -0.26 (0.19) .16 | -0.05 (0.47) .91 | -0.31 (0.34) .37 |
| a | Slope \* height | --- | --- | 0.00 (0.13) .97 | -2.60 (10.83) .81 | 0.11 (0.18) .54 |
| a | Slope \* smoking | --- | --- | --- | -4.50 (4.73) .34 | 1.24 (2.87) .67 |
| a | Slope \* cardio | --- | --- | --- | -3.59 (13.21) .79 | 1.27 (4.14) .76 |
| a | Slope \* diabetes | --- | --- | --- | -2.65 (4.78) .58 | 0.71 (3.62) .84 |
| b | Level | 132.39 (9.27) <.01 | 131.37 (9.60) <.01 | 169.30 (31.73) <.01 | -4.75 (9.17) .60 | 167.62 (52.37) <.01 |
| b | Slope | 1.79 (2.07) .39 | 1.85 (3.17) .56 | -6.16 (8.66) .48 | -12.85 (5.42) .02 | -2.39 (11.58) .84 |
| b | Level \* age | 1.98 (0.81) .01 | 1.98 (0.81) .01 | 0.77 (1.92) .69 | -0.12 (0.22) .59 | 0.78 (2.92) .79 |
| b | Level \* education | --- | 0.12 (0.36) .75 | -6.24 (3.41) .07 | -0.11 (0.13) .40 | -6.02 (4.48) .18 |
| b | Level \* height | --- | --- | -0.73 (1.39) .60 | -0.27 (0.34) .42 | -0.86 (1.98) .66 |
| b | Level \* smoking | --- | --- | --- | -0.11 (0.18) .56 | -2.04 (38.09) .96 |
| b | Level \* cardio | --- | --- | --- | 0.05 (0.20) .81 | 20.81 (35.95) .56 |
| b | Level \* diabetes | --- | --- | --- | 0.08 (0.14) .56 | 7.01 (28.04) .80 |
| b | Slope \* age | 0.10 (0.20) .61 | 0.10 (0.20) .61 | 0.35 (0.45) .43 | 1.66 (2.98) .58 | 0.27 (0.62) .66 |
| b | Slope \* education | --- | -0.00 (0.33) .99 | 0.15 (0.77) .84 | 1.90 (1.48) .20 | 0.01 (0.98) .99 |
| b | Slope \* height | --- | --- | 0.48 (0.36) .18 | 0.94 (4.13) .82 | 0.56 (0.54) .30 |
| b | Slope \* smoking | --- | --- | --- | 0.68 (1.36) .62 | -2.08 (9.28) .82 |
| b | Slope \* cardio | --- | --- | --- | 0.13 (3.82) .97 | -7.24 (14.08) .61 |
| b | Slope \* diabetes | --- | --- | --- | -0.12 (1.52) .94 | 2.88 (9.62) .76 |
| a | Var (Level) | 329.88 (62.73) <.01 | 338.17 (67.29) <.01 | 231.01 (100.41) .02 | 163.37 (43.63) <.01 | 226.47 (137.78) .10 |
| a | Var (Slope) | 1.97 (1.55) .20 | 2.61 (1.86) .16 | 2.31 (4.38) .60 | 163.75 (17.01) <.01 | 1.86 (7.07) .79 |
| a | Var (Residual) | 81.06 (7.17) <.01 | 79.47 (7.16) <.01 | 71.40 (12.88) <.01 | -2.91 (10.20) .78 | 72.67 (16.99) <.01 |
| a | Covar (Level, Slope) | 5.14 (10.82) .64 | 2.62 (11.99) .83 | -3.61 (18.60) .85 | 2.92 (5.25) .58 | -6.45 (31.15) .84 |
| b | Var (Level) | 3897.25 (603.04) <.01 | 3873.28 (614.32) <.01 | 1638.00 (744.22) .03 | 0.76 (2.70) .78 | 1638.08 (1127.68) .15 |
| b | Var (Slope) | 40.08 (14.72) .01 | 40.67 (15.73) .01 | 39.93 (35.34) .26 | 1.61 (1.07) .13 | 30.53 (63.06) .63 |
| b | Var (Residual) | 1535.16 (54.13) <.01 | 1532.30 (54.76) <.01 | 1608.35 (157.65) <.01 | -6.06 (4.23) .15 | 1597.65 (214.79) <.01 |
| b | Covar (Level, Slope) | -110.92 (80.37) .17 | -110.87 (96.73) .25 | -99.32 (173.85) .57 | -6.03 (1.55) <.01 | -98.37 (273.88) .72 |
| ab | Covar (Levels) | -423.02 (183.85) .02 | -411.66 (202.30) .04 | -10.93 (225.49) .96 | -0.69 (1.86) .71 | 19.15 (283.90) .95 |
| ab | Covar (Slopes) | -5.96 (5.11) .24 | -5.41 (5.56) .33 | -6.86 (8.75) .43 | -0.15 (1.52) .92 | -3.35 (16.56) .84 |
| ab | Covar (Residuals) | 46.56 (24.18) .05 | 45.02 (24.64) .07 | 6.53 (37.26) .86 | -0.85 (36.70) .98 | 7.41 (56.76) .90 |
| a | Level | 107.45 (3.34) <.01 | 107.57 (5.74) <.01 | 102.33 (10.98) <.01 | -1.04 (12.43) .93 | 108.44 (18.76) <.01 |
| a | Slope | -2.05 (0.83) .01 | -2.04 (1.27) .11 | 0.03 (3.25) .99 | 19.32 (34.02) .57 | -1.93 (5.59) .73 |
| a | Level \* age | -0.93 (0.35) .01 | -0.92 (0.36) .01 | -0.41 (0.52) .43 | 2.17 (10.49) .84 | -0.47 (0.74) .52 |
| a | Level \* education | --- | -0.02 (0.62) .98 | 0.65 (0.73) .38 | 6.71 (22.98) .77 | 0.71 (1.30) .59 |
| a | Level \* height | --- | --- | 0.10 (0.42) .80 | 4.01 (11.70) .73 | -0.05 (0.62) .94 |
| a | Level \* smoking | --- | --- | --- | 0.31 (0.63) .62 | -2.54 (11.81) .83 |
| a | Level \* cardio | --- | --- | --- | 0.26 (0.31) .41 | -3.86 (14.41) .79 |
| a | Level \* diabetes | --- | --- | --- | 0.04 (1.00) .97 | -5.16 (9.65) .59 |
| a | Slope \* age | -0.11 (0.09) .22 | -0.11 (0.09) .24 | -0.16 (0.17) .33 | -0.24 (0.51) .64 | -0.12 (0.26) .66 |
| a | Slope \* education | --- | 0.00 (0.14) .99 | -0.26 (0.19) .16 | 0.45 (0.50) .37 | -0.31 (0.34) .37 |
| a | Slope \* height | --- | --- | 0.00 (0.13) .97 | 0.49 (0.36) .18 | 0.11 (0.18) .54 |
| a | Slope \* smoking | --- | --- | --- | -1.75 (9.20) .85 | 1.24 (2.87) .67 |
| a | Slope \* cardio | --- | --- | --- | -3.64 (3.63) .32 | 1.27 (4.14) .76 |
| a | Slope \* diabetes | --- | --- | --- | -7.20 (14.02) .61 | 0.71 (3.62) .84 |
| b | Level | 132.39 (9.27) <.01 | 131.37 (9.60) <.01 | 169.30 (31.73) <.01 | -0.54 (3.94) .89 | 167.62 (52.37) <.01 |
| b | Slope | 1.79 (2.07) .39 | 1.85 (3.17) .56 | -6.16 (8.66) .48 | 2.08 (8.49) .81 | -2.39 (11.58) .84 |
| b | Level \* age | 1.98 (0.81) .01 | 1.98 (0.81) .01 | 0.77 (1.92) .69 | 5.73 (3.51) .10 | 0.78 (2.92) .79 |
| b | Level \* education | --- | 0.12 (0.36) .75 | -6.24 (3.41) .07 | 226.86 (129.33) .08 | -6.02 (4.48) .18 |
| b | Level \* height | --- | --- | -0.73 (1.39) .60 | 302.24 (72.23) <.01 | -0.86 (1.98) .66 |
| b | Level \* smoking | --- | --- | --- | 2.23 (4.95) .65 | -2.04 (38.09) .96 |
| b | Level \* cardio | --- | --- | --- | 3.21 (3.99) .42 | 20.81 (35.95) .56 |
| b | Level \* diabetes | --- | --- | --- | 71.78 (14.37) <.01 | 7.01 (28.04) .80 |
| b | Slope \* age | 0.10 (0.20) .61 | 0.10 (0.20) .61 | 0.35 (0.45) .43 | 76.60 (8.35) <.01 | 0.27 (0.62) .66 |
| b | Slope \* education | --- | -0.00 (0.33) .99 | 0.15 (0.77) .84 | -5.45 (25.08) .83 | 0.01 (0.98) .99 |
| b | Slope \* height | --- | --- | 0.48 (0.36) .18 | 1.48 (16.01) .93 | 0.56 (0.54) .30 |
| b | Slope \* smoking | --- | --- | --- | 1607.71 (1117.90) .15 | -2.08 (9.28) .82 |
| b | Slope \* cardio | --- | --- | --- | 2354.97 (504.14) <.01 | -7.24 (14.08) .61 |
| b | Slope \* diabetes | --- | --- | --- | 28.55 (55.08) .60 | 2.88 (9.62) .76 |
| a | Var (Level) | 329.88 (62.73) <.01 | 338.17 (67.29) <.01 | 231.01 (100.41) .02 | 35.16 (34.05) .30 | 226.47 (137.78) .10 |
| a | Var (Slope) | 1.97 (1.55) .20 | 2.61 (1.86) .16 | 2.31 (4.38) .60 | 1595.86 (194.81) <.01 | 1.86 (7.07) .79 |
| a | Var (Residual) | 81.06 (7.17) <.01 | 79.47 (7.16) <.01 | 71.40 (12.88) <.01 | 1467.17 (70.88) <.01 | 72.67 (16.99) <.01 |
| a | Covar (Level, Slope) | 5.14 (10.82) .64 | 2.62 (11.99) .83 | -3.61 (18.60) .85 | -86.01 (259.14) .74 | -6.45 (31.15) .84 |
| b | Var (Level) | 3897.25 (603.04) <.01 | 3873.28 (614.32) <.01 | 1638.00 (744.22) .03 | -43.29 (118.05) .71 | 1638.08 (1127.68) .15 |
| b | Var (Slope) | 40.08 (14.72) .01 | 40.67 (15.73) .01 | 39.93 (35.34) .26 | -9.08 (280.36) .97 | 30.53 (63.06) .63 |
| b | Var (Residual) | 1535.16 (54.13) <.01 | 1532.30 (54.76) <.01 | 1608.35 (157.65) <.01 | -225.90 (171.18) .19 | 1597.65 (214.79) <.01 |
| b | Covar (Level, Slope) | -110.92 (80.37) .17 | -110.87 (96.73) .25 | -99.32 (173.85) .57 | -5.16 (15.37) .74 | -98.37 (273.88) .72 |
| ab | Covar (Levels) | -423.02 (183.85) .02 | -411.66 (202.30) .04 | -10.93 (225.49) .96 | -7.09 (13.23) .59 | 19.15 (283.90) .95 |
| ab | Covar (Slopes) | -5.96 (5.11) .24 | -5.41 (5.56) .33 | -6.86 (8.75) .43 | 9.99 (48.12) .84 | -3.35 (16.56) .84 |
| ab | Covar (Residuals) | 46.56 (24.18) .05 | 45.02 (24.64) .07 | 6.53 (37.26) .86 | 57.56 (34.95) .10 | 7.41 (56.76) .90 |
|  | Correlation of Levels | -0.37 | -0.36 | -0.018 | -0.015 | 0.031 |
|  | Correlation of Slopes | -0.67 | -0.52 | -0.715 | -0.268 | -0.444 |
|  | Correlation of Residuals | 0.13 | 0.13 | 0.019 | -0.646 | 0.022 |
|  | Correlation of Levels | -0.37 | -0.36 | -0.018 | -0.668 | 0.031 |
|  | Correlation of Slopes | -0.67 | -0.52 | -0.715 | 0.030 | -0.444 |
|  | Correlation of Residuals | 0.13 | 0.13 | 0.019 | 0.172 | 0.022 |
|  | N | 368 | 368 | 72 | 72 | 72 |
|  | occasions | 8 | 8 | 8 | 8 | 8 |
|  | parameters | 21 | 25 | 29 | 41 | 45 |
|  | LL | -7,815 | -7,814 | -2,664 | -2,660 | -2,657 |
|  | AIC | 15,673 | 15,678 | 5,386 | 5,402 | 5,405 |
|  | BIC | 15,755 | 15,776 | 5,452 | 5,495 | 5,507 |

## waisvocab

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 108.71 (3.47) <.01 | 105.96 (5.83) <.01 | 102.44 (10.37) <.01 | 112.28 (7.96) <.01 | 107.24 (18.87) <.01 |
| a | Slope | -2.25 (0.81) .01 | -1.57 (1.21) .20 | -0.29 (3.45) .93 | -2.77 (2.66) .30 | -1.44 (6.09) .81 |
| a | Level \* age | -0.94 (0.37) .01 | -0.94 (0.37) .01 | -0.46 (0.50) .36 | -1.05 (0.42) .01 | -0.47 (0.74) .52 |
| a | Level \* education | --- | 0.40 (0.66) .55 | 0.69 (0.75) .36 | 0.70 (0.69) .31 | 0.74 (1.19) .53 |
| a | Level \* height | --- | --- | 0.09 (0.40) .81 | 0.08 (0.44) .86 | -0.03 (0.49) .95 |
| a | Level \* smoking | --- | --- | --- | -5.63 (4.66) .23 | -1.49 (7.95) .85 |
| a | Level \* cardio | --- | --- | --- | -2.43 (4.83) .61 | -4.44 (14.04) .75 |
| a | Level \* diabetes | --- | --- | --- | -13.06 (5.40) .02 | -5.70 (14.59) .70 |
| a | Slope \* age | -0.10 (0.10) .32 | -0.10 (0.09) .30 | -0.12 (0.18) .49 | -0.11 (0.13) .39 | -0.11 (0.32) .73 |
| a | Slope \* education | --- | -0.10 (0.14) .49 | -0.27 (0.21) .19 | -0.10 (0.22) .65 | -0.31 (0.36) .40 |
| a | Slope \* height | --- | --- | 0.01 (0.14) .95 | 0.02 (0.13) .88 | 0.09 (0.18) .60 |
| a | Slope \* smoking | --- | --- | --- | 1.85 (1.53) .23 | 0.68 (2.98) .82 |
| a | Slope \* cardio | --- | --- | --- | 0.60 (1.22) .62 | 1.54 (5.17) .77 |
| a | Slope \* diabetes | --- | --- | --- | 0.13 (1.49) .93 | 0.83 (5.09) .87 |
| b | Level | 43.98 (1.34) <.01 | 44.34 (1.40) <.01 | 32.10 (4.62) <.01 | 36.76 (3.03) <.01 | 34.38 (7.59) <.01 |
| b | Slope | -0.36 (0.30) .22 | -0.73 (0.46) .11 | 1.55 (1.29) .23 | 0.01 (0.88) .99 | 1.28 (2.22) .56 |
| b | Level \* age | 0.42 (0.14) <.01 | 0.42 (0.14) <.01 | 0.41 (0.29) .15 | 0.37 (0.18) .04 | 0.37 (0.37) .31 |
| b | Level \* education | --- | -0.05 (0.06) .39 | 1.60 (0.49) <.01 | 1.52 (0.28) <.01 | 1.51 (0.66) .02 |
| b | Level \* height | --- | --- | 0.03 (0.24) .89 | 0.02 (0.33) .95 | 0.07 (0.27) .80 |
| b | Level \* smoking | --- | --- | --- | -1.03 (2.08) .62 | -1.83 (4.12) .66 |
| b | Level \* cardio | --- | --- | --- | 0.86 (1.90) .65 | -3.71 (7.78) .63 |
| b | Level \* diabetes | --- | --- | --- | -2.55 (2.32) .27 | 1.64 (4.63) .72 |
| b | Slope \* age | -0.06 (0.03) .07 | -0.06 (0.03) .07 | -0.10 (0.07) .15 | -0.09 (0.05) .08 | -0.08 (0.11) .47 |
| b | Slope \* education | --- | 0.05 (0.06) .34 | -0.06 (0.14) .66 | 0.03 (0.08) .71 | -0.05 (0.21) .81 |
| b | Slope \* height | --- | --- | -0.02 (0.06) .70 | -0.01 (0.07) .92 | -0.05 (0.08) .56 |
| b | Slope \* smoking | --- | --- | --- | -0.00 (0.54) .99 | 0.26 (0.83) .76 |
| b | Slope \* cardio | --- | --- | --- | -0.49 (0.52) .34 | -0.16 (1.75) .92 |
| b | Slope \* diabetes | --- | --- | --- | -0.56 (0.61) .36 | -0.64 (1.49) .67 |
| a | Var (Level) | 335.85 (61.16) <.01 | 326.88 (60.64) <.01 | 220.75 (89.67) .01 | 304.16 (73.36) <.01 | 223.48 (159.98) .16 |
| a | Var (Slope) | 2.37 (1.48) .11 | 1.97 (1.42) .17 | 1.87 (4.96) .71 | 2.61 (3.74) .48 | 1.45 (6.75) .83 |
| a | Var (Residual) | 79.02 (7.21) <.01 | 79.68 (7.35) <.01 | 72.88 (14.53) <.01 | 77.47 (8.44) <.01 | 73.68 (17.01) <.01 |
| a | Covar (Level, Slope) | 3.61 (10.86) .74 | 5.53 (10.82) .61 | -0.90 (18.27) .96 | 1.30 (15.84) .93 | -5.31 (32.84) .87 |
| b | Var (Level) | 142.49 (17.02) <.01 | 144.23 (17.50) <.01 | 45.78 (20.95) .03 | 91.57 (18.21) <.01 | 45.17 (30.43) .14 |
| b | Var (Slope) | 0.59 (0.41) .15 | 0.54 (0.38) .15 | 0.31 (0.87) .72 | 0.39 (1.10) .72 | 0.40 (1.44) .78 |
| b | Var (Residual) | 49.58 (2.33) <.01 | 49.74 (2.36) <.01 | 40.64 (4.19) <.01 | 47.75 (2.96) <.01 | 40.41 (5.64) <.01 |
| b | Covar (Level, Slope) | -2.47 (2.42) .31 | -3.43 (2.69) .20 | -0.59 (3.89) .88 | -2.13 (4.27) .62 | -1.31 (6.34) .84 |
| ab | Covar (Levels) | 26.02 (29.51) .38 | 16.83 (31.56) .59 | -7.21 (26.00) .78 | 6.94 (29.02) .81 | -14.21 (42.67) .74 |
| ab | Covar (Slopes) | -0.24 (0.62) .70 | -0.32 (0.58) .59 | -0.29 (1.63) .86 | -0.34 (1.69) .84 | -0.45 (2.26) .84 |
| ab | Covar (Residuals) | -3.21 (5.13) .53 | -2.97 (5.31) .58 | -3.24 (9.12) .72 | -3.81 (6.28) .54 | -3.38 (12.35) .78 |
|  | Correlation of Levels | 0.119 | 0.078 | -0.072 | 0.042 | -0.141 |
|  | Correlation of Slopes | -0.205 | -0.307 | -0.383 | -0.341 | -0.596 |
|  | Correlation of Residuals | -0.051 | -0.047 | -0.060 | -0.063 | -0.062 |
|  | N | 377 | 377 | 72 | 222 | 72 |
|  | occasions | 8 | 8 | 8 | 5 | 8 |
|  | parameters | 21 | 25 | 29 | 43 | 45 |
|  | LL | -6,079 | -6,075 | -2,013 | -4,805 | -2,007 |
|  | AIC | 12,200 | 12,199 | 4,084 | 9,695 | 4,103 |
|  | BIC | 12,282 | 12,297 | 4,150 | 9,842 | 4,206 |

## word\_im

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

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| a | Level | 111.25 (7.53) <.01 |
| a | Slope | -2.58 (2.41) .28 |
| a | Level \* age | -1.07 (0.40) .01 |
| a | Level \* education | 0.76 (0.67) .26 |
| a | Level \* height | 0.04 (0.39) .92 |
| a | Level \* smoking | -5.10 (4.62) .27 |
| a | Level \* cardio | -2.48 (4.89) .61 |
| a | Level \* diabetes | -12.70 (5.26) .02 |
| a | Slope \* age | -0.13 (0.13) .32 |
| a | Slope \* education | -0.09 (0.19) .62 |
| a | Slope \* height | -0.01 (0.12) .91 |
| a | Slope \* smoking | 1.65 (1.43) .25 |
| a | Slope \* cardio | 0.59 (1.26) .64 |
| a | Slope \* diabetes | -0.01 (1.40) .99 |
| b | Level | 31.02 (1.58) <.01 |
| b | Slope | -0.15 (0.50) .76 |
| b | Level \* age | -0.24 (0.10) .01 |
| b | Level \* education | 0.26 (0.13) .04 |
| b | Level \* height | -0.23 (0.11) .05 |
| b | Level \* smoking | -0.10 (0.91) .91 |
| b | Level \* cardio | 1.53 (0.74) .04 |
| b | Level \* diabetes | -2.74 (0.96) <.01 |
| b | Slope \* age | -0.01 (0.03) .59 |
| b | Slope \* education | -0.00 (0.04) .95 |
| b | Slope \* height | -0.01 (0.04) .75 |
| b | Slope \* smoking | 0.15 (0.29) .61 |
| b | Slope \* cardio | -0.17 (0.27) .54 |
| b | Slope \* diabetes | 0.51 (0.35) .14 |
| a | Var (Level) | 297.19 (69.50) <.01 |
| a | Var (Slope) | 1.81 (3.59) .61 |
| a | Var (Residual) | 78.67 (9.69) <.01 |
| a | Covar (Level, Slope) | 4.39 (14.25) .76 |
| b | Var (Level) | 14.19 (4.41) <.01 |
| b | Var (Slope) | 0.27 (0.32) .40 |
| b | Var (Residual) | 12.75 (0.84) <.01 |
| b | Covar (Level, Slope) | 0.30 (0.95) .75 |
| ab | Covar (Levels) | 11.33 (13.26) .39 |
| ab | Covar (Slopes) | 0.09 (0.88) .92 |
| ab | Covar (Residuals) | 2.95 (2.69) .27 |
|  | Correlation of Levels | 0.174 |
|  | Correlation of Slopes | 0.127 |
|  | Correlation of Residuals | 0.093 |
|  | N | 222 |
|  | occasions | 5 |
|  | parameters | 43 |
|  | LL | -4,265 |
|  | AIC | 8,617 |
|  | BIC | 8,763 |

## Summary

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

Computed correlations:

label

process\_b

a

ae

aeh

aehplus

full

Correlation of Levels

block

0.40

0.40

0.28

0.33

0.25

Correlation of Levels

bnt

0.20

0.20

0.22

0.19

0.19

Correlation of Levels

categories

0.27

0.25

0.22

0.31

0.20

Correlation of Levels

digit\_tot

0.30

0.28

0.11

0.17

0.02

Correlation of Levels

fas

0.30

0.29

-0.04

0.15

-0.10

Correlation of Levels

information

0.16

0.12

0.45

.

0.47

Correlation of Levels

logic\_tot

0.25

0.21

0.19

0.21

0.17

Correlation of Levels

mmse

0.42

0.42

0.29

.

0.22

Correlation of Levels

symbol

0.47

0.49

0.08

0.39

-0.03

Correlation of Levels

trailsb

-0.37

-0.36

-0.02

-0.27

0.03

Correlation of Levels

waisvocab

0.12

0.08

-0.07

0.04

-0.14

Correlation of Levels

word\_im

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0.17

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label

process\_b

a

ae

aeh

aehplus

full

Correlation of Slopes

block

0.39

0.40

0.22

0.31

0.17

Correlation of Slopes

bnt

0.38

0.38

0.33

-0.04

0.36

Correlation of Slopes

categories

0.45

0.33

0.60

0.78

0.72

Correlation of Slopes

digit\_tot

0.18

0.08

0.79

0.39

0.68

Correlation of Slopes

fas

0.78

0.74

0.34

0.55

0.66

Correlation of Slopes

information

0.70

0.86

-0.16

.

-0.22

Correlation of Slopes

logic\_tot

0.00

-0.25

0.20

0.09

0.60

Correlation of Slopes

mmse

-0.02

-0.02

0.11

.

0.41

Correlation of Slopes

symbol

0.32

0.23

0.84

0.67

0.73

Correlation of Slopes

trailsb

-0.67

-0.52

-0.71

-0.67

-0.44

Correlation of Slopes

waisvocab

-0.21

-0.31

-0.38

-0.34

-0.60

Correlation of Slopes

word\_im

.

.

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0.13

.

label

process\_b

a

ae

aeh

aehplus

full

Correlation of Residuals

block

-0.05

-0.05

0.01

-0.08

0.00

Correlation of Residuals

bnt

0.03

0.03

-0.04

0.02

-0.03

Correlation of Residuals

categories

-0.03

-0.02

-0.03

0.00

-0.02

Correlation of Residuals

digit\_tot

-0.01

-0.02

0.00

-0.06

-0.01

Correlation of Residuals

fas

0.04

0.03

-0.01

0.02

-0.00

Correlation of Residuals

information

-0.13

-0.13

0.02

.

0.03

Correlation of Residuals

logic\_tot

-0.02

-0.02

-0.02

-0.03

-0.03

Correlation of Residuals

mmse

0.01

0.01

0.03

.

0.03

Correlation of Residuals

symbol

0.04

0.04

-0.06

-0.01

-0.03

Correlation of Residuals

trailsb

0.13

0.13

0.02

0.17

0.02

Correlation of Residuals

waisvocab

-0.05

-0.05

-0.06

-0.06

-0.06

Correlation of Residuals

word\_im

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.

.

0.09

.

P-values for corresponding covariances:

label

process\_b

a

ae

aeh

aehplus

full

Covariance of Levels

block

0.00

0.00

0.36

0.02

0.58

Covariance of Levels

bnt

0.13

0.15

0.49

0.32

0.66

Covariance of Levels

categories

0.07

0.13

0.54

0.08

0.66

Covariance of Levels

digit\_tot

0.03

0.04

0.75

0.34

0.97

Covariance of Levels

fas

0.01

0.02

0.87

0.37

0.77

Covariance of Levels

information

0.34

0.53

0.24

.

0.46

Covariance of Levels

logic\_tot

0.08

0.18

0.53

0.26

0.68

Covariance of Levels

mmse

0.06

0.07

0.55

.

0.77

Covariance of Levels

symbol

0.00

0.00

0.77

0.01

0.92

Covariance of Levels

trailsb

0.02

0.04

0.96

0.19

0.95

Covariance of Levels

waisvocab

0.38

0.59

0.78

0.81

0.74

Covariance of Levels

word\_im

.

.

.

0.39

.

label

process\_b

a

ae

aeh

aehplus

full

Covariance of Slopes

block

0.58

0.61

0.95

0.86

0.97

Covariance of Slopes

bnt

0.83

0.83

0.88

0.99

0.91

Covariance of Slopes

categories

0.49

0.64

0.56

0.14

0.66

Covariance of Slopes

digit\_tot

0.77

0.91

0.51

0.66

0.67

Covariance of Slopes

fas

0.33

0.38

0.87

0.60

0.79

Covariance of Slopes

information

0.32

0.30

0.97

.

0.98

Covariance of Slopes

logic\_tot

1.00

0.72

0.87

0.90

0.85

Covariance of Slopes

mmse

0.98

0.99

0.95

.

0.93

Covariance of Slopes

symbol

0.48

0.67

0.36

0.23

0.64

Covariance of Slopes

trailsb

0.24

0.33

0.43

0.59

0.84

Covariance of Slopes

waisvocab

0.70

0.59

0.86

0.84

0.84

Covariance of Slopes

word\_im

.

.

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0.92

.

label

process\_b

a

ae

aeh

aehplus

full

Covariance of Residuals

block

0.50

0.51

0.91

0.35

0.98

Covariance of Residuals

bnt

0.60

0.61

0.80

0.76

0.89

Covariance of Residuals

categories

0.72

0.75

0.85

0.98

0.91

Covariance of Residuals

digit\_tot

0.86

0.84

0.98

0.56

0.98

Covariance of Residuals

fas

0.61

0.65

0.97

0.85

0.99

Covariance of Residuals

information

0.05

0.06

0.88

.

0.91

Covariance of Residuals

logic\_tot

0.75

0.82

0.90

0.78

0.91

Covariance of Residuals

mmse

0.91

0.92

0.84

.

0.86

Covariance of Residuals

symbol

0.48

0.48

0.74

0.91

0.90

Covariance of Residuals

trailsb

0.05

0.07

0.86

0.10

0.90

Covariance of Residuals

waisvocab

0.53

0.58

0.72

0.54

0.78

Covariance of Residuals

word\_im

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0.27

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#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