ILSE : Seed Report

Date: 2016-12-05

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

# Available models

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

|  |  |  |
| --- | --- | --- |
| process\_a | process\_b | n\_models |
| grip | fluency | 2 |
| grip | piccomp | 2 |
| grip | spatial\_ab | 2 |
| grip | symbol | 2 |
| grip | waisgeneral | 2 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| study\_name | subgroup | model\_type | process\_a | process\_b | n\_models |
| ilse | female | aehplus | grip | fluency | 1 |
| ilse | female | aehplus | grip | piccomp | 1 |
| ilse | female | aehplus | grip | spatial\_ab | 1 |
| ilse | female | aehplus | grip | symbol | 1 |
| ilse | female | aehplus | grip | waisgeneral | 1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| study\_name | subgroup | model\_type | process\_a | process\_b | n\_models |
| ilse | male | aehplus | grip | fluency | 1 |
| ilse | male | aehplus | grip | piccomp | 1 |
| ilse | male | aehplus | grip | spatial\_ab | 1 |
| ilse | male | aehplus | grip | symbol | 1 |
| ilse | male | aehplus | grip | waisgeneral | 1 |

# female

Gender = *female*; Model type: *aehplus*; Process (a) = *grip*; Process (b): *fluency*, *piccomp*, *spatial\_ab*, *symbol*, *waisgeneral*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| process | label | fluency | piccomp | spatial\_ab | symbol | waisgeneral | mean(sd) |
| ab | Covar (Levels) | 13.64 (14.92) .36 | 2.07 (6.71) .76 | 0.80 (11.07) .94 | -48.56 (20.52) .02 | 2.20 (7.03) .75 | --- |
| ab | Covar (Slopes) | 0.24 (0.27) .38 | 0.07 (0.12) .57 | 0.08 (0.16) .59 | 0.12 (0.17) .48 | 0.11 (0.10) .27 | --- |
| ab | Covar (Residuals) | 9.98 (5.52) .07 | 0.36 (2.76) .90 | -0.37 (3.83) .92 | -0.64 (3.70) .86 | -1.78 (1.78) .32 | --- |
| er | Corr (Levels) | 0.10 (0.11) .35 | 0.04 (0.12) .76 | 0.01 (0.10) .94 | -0.25 (0.09) .01 | 0.03 (0.09) .75 | --- |
| er | Corr (Slopes) | 0.58 (0.72) .43 | 0.26 (0.48) .59 | 0.37 (0.79) .64 | 0.21 (0.30) .48 | 0.42 (0.42) .32 | --- |
| er | Corr (Residuals) | 0.15 (0.08) .06 | 0.01 (0.08) .90 | -0.01 (0.09) .92 | -0.01 (0.07) .86 | -0.08 (0.08) .31 | --- |
| a | Level | 88.57 (13.39) <.01 | 87.42 (13.96) <.01 | 87.30 (13.77) <.01 | 87.55 (13.55) <.01 | 87.84 (14.24) <.01 | 87.73(0.51) |
| a | Slope | -7.09 (2.24) <.01 | -6.43 (2.32) .01 | -6.36 (2.30) .01 | -6.55 (2.21) <.01 | -6.77 (2.33) <.01 | -6.64(0.30) |
| a | Level \* age | 2.91 (1.79) .10 | 2.76 (1.89) .14 | 2.75 (1.86) .14 | 2.78 (1.82) .13 | 2.82 (1.91) .14 | 2.81(0.07) |
| a | Level \* education | -3.03 (3.51) .39 | -3.05 (3.59) .40 | -3.02 (3.53) .39 | -3.04 (3.57) .39 | -3.05 (3.65) .40 | -3.04(0.01) |
| a | Level \* height | 0.63 (0.32) .05 | 0.63 (0.32) .05 | 0.63 (0.32) .05 | 0.64 (0.32) .05 | 0.63 (0.32) .05 | 0.63(0.00) |
| a | Level \* smoking | -4.99 (3.80) .19 | -4.92 (3.80) .20 | -4.90 (3.75) .19 | -4.87 (3.79) .20 | -4.94 (3.81) .19 | -4.92(0.04) |
| a | Level \* cardio | 1.84 (4.34) .67 | 2.02 (4.37) .64 | 2.04 (4.27) .63 | 1.98 (4.37) .65 | 1.97 (4.45) .66 | 1.97(0.08) |
| a | Level \* diabetes | --- | --- | --- | --- | --- | --- |
| a | Slope \* age | -0.63 (0.31) .04 | -0.55 (0.32) .09 | -0.54 (0.32) .09 | -0.56 (0.31) .07 | -0.59 (0.32) .06 | -0.57(0.04) |
| a | Slope \* education | 0.62 (0.49) .21 | 0.64 (0.49) .20 | 0.62 (0.48) .20 | 0.65 (0.50) .19 | 0.65 (0.52) .21 | 0.64(0.02) |
| a | Slope \* height | -0.01 (0.04) .73 | -0.02 (0.04) .69 | -0.01 (0.04) .73 | -0.01 (0.04) .74 | -0.02 (0.04) .71 | -0.02(0.00) |
| a | Slope \* smoking | 0.36 (0.55) .51 | 0.32 (0.54) .55 | 0.31 (0.54) .57 | 0.32 (0.54) .55 | 0.34 (0.55) .53 | 0.33(0.02) |
| a | Slope \* cardio | -0.12 (0.64) .85 | -0.18 (0.64) .78 | -0.19 (0.61) .75 | -0.14 (0.63) .82 | -0.14 (0.65) .83 | -0.15(0.03) |
| a | Slope \* diabetes | --- | --- | --- | --- | --- | --- |
| b | Level | 24.11 (5.14) <.01 | 9.21 (2.25) <.01 | 11.11 (3.84) <.01 | 38.18 (6.49) <.01 | 12.02 (2.23) <.01 | --- |
| b | Slope | -0.17 (0.49) .72 | 0.33 (0.27) .22 | 0.06 (0.30) .83 | 0.02 (0.37) .96 | 0.34 (0.17) .05 | --- |
| b | Level \* age | -0.68 (0.71) .33 | -0.19 (0.31) .54 | -1.15 (0.52) .03 | -0.62 (0.90) .49 | -0.08 (0.31) .80 | --- |
| b | Level \* education | 6.28 (1.29) <.01 | 2.26 (0.63) <.01 | 3.44 (1.03) <.01 | 8.90 (1.57) <.01 | 4.27 (0.70) <.01 | --- |
| b | Level \* height | -0.04 (0.11) .73 | -0.01 (0.04) .74 | 0.06 (0.08) .49 | 0.06 (0.12) .60 | 0.05 (0.05) .32 | --- |
| b | Level \* smoking | 0.15 (1.24) .90 | -0.76 (0.53) .15 | -0.55 (0.94) .56 | -0.14 (1.51) .93 | -0.28 (0.59) .63 | --- |
| b | Level \* cardio | -0.96 (1.42) .50 | -0.43 (0.61) .48 | -0.78 (1.04) .45 | -0.79 (1.86) .67 | -0.07 (0.64) .92 | --- |
| b | Level \* diabetes | --- | --- | --- | --- | --- | --- |
| b | Slope \* age | -0.01 (0.07) .92 | 0.06 (0.04) .10 | 0.04 (0.04) .37 | 0.06 (0.05) .27 | 0.04 (0.02) .09 | --- |
| b | Slope \* education | 0.13 (0.12) .30 | 0.02 (0.07) .74 | 0.17 (0.09) .06 | -0.09 (0.10) .36 | -0.02 (0.05) .72 | --- |
| b | Slope \* height | 0.01 (0.01) .35 | 0.01 (0.01) .13 | -0.02 (0.01) .02 | 0.00 (0.01) .49 | 0.00 (0.00) .54 | --- |
| b | Slope \* smoking | 0.01 (0.12) .95 | 0.05 (0.07) .42 | -0.08 (0.08) .35 | -0.06 (0.10) .51 | 0.01 (0.05) .81 | --- |
| b | Slope \* cardio | -0.01 (0.14) .96 | 0.04 (0.07) .62 | -0.08 (0.08) .31 | -0.03 (0.10) .79 | -0.04 (0.05) .45 | --- |
| b | Slope \* diabetes | --- | --- | --- | --- | --- | --- |
| a | Var (Level) | 417.16 (69.34) <.01 | 413.40 (71.10) <.01 | 411.65 (70.06) <.01 | 415.13 (69.86) <.01 | 421.01 (71.30) <.01 | 415.67(3.62) |
| a | Var (Slope) | 4.90 (1.39) <.01 | 4.70 (1.39) <.01 | 4.58 (1.38) <.01 | 4.88 (1.40) <.01 | 5.12 (1.43) <.01 | 4.84(0.21) |
| a | Var (Residual) | 171.91 (21.21) <.01 | 173.83 (22.57) <.01 | 174.94 (22.65) <.01 | 173.18 (22.88) <.01 | 167.91 (22.12) <.01 | 172.35(2.72) |
| b | Var (Level) | 42.57 (6.49) <.01 | 7.47 (1.55) <.01 | 29.82 (4.37) <.01 | 92.85 (10.82) <.01 | 14.13 (1.86) <.01 | --- |
| b | Var (Slope) | 0.04 (0.08) .64 | 0.01 (0.01) .33 | 0.01 (0.03) .70 | 0.07 (0.05) .15 | 0.01 (0.01) .10 | --- |
| b | Var (Residual) | 25.70 (2.52) <.01 | 6.49 (0.67) <.01 | 11.30 (0.90) <.01 | 14.17 (1.13) <.01 | 2.92 (0.35) <.01 | --- |
| a | Covar (Level, Slope) | -44.58 (8.78) <.01 | -43.59 (8.87) <.01 | -43.02 (8.92) <.01 | -44.44 (8.79) <.01 | -45.40 (9.05) <.01 | -44.21(0.92) |
| b | Covar (Level, Slope) | -0.29 (0.58) .61 | -0.03 (0.12) .78 | 0.07 (0.29) .80 | -0.52 (0.64) .42 | -0.11 (0.11) .31 | --- |
|  | Correlation of Levels | 0.10 | 0.037 | 0.0072 | -0.247 | 0.029 | -0.01(0.13) |
|  | Correlation of Slopes | 0.57 | 0.260 | 0.3744 | 0.211 | 0.426 | 0.37(0.14) |
|  | Correlation of Residuals | 0.15 | 0.011 | -0.0083 | -0.013 | -0.080 | 0.01(0.08) |
|  | N | 225 | 225 | 225 | 225 | 225 | 225.00(0.00) |
|  | occasions | 3 | 3 | 3 | 3 | 3 | 3.00(0.00) |
|  | parameters | 37 | 37 | 37 | 37 | 37 | 37.00(0.00) |
|  | LL | -4,056 | -3,642 | -3,871 | -4,037 | -3,552 | -3,832(228) |
|  | AIC | 8,186 | 7,359 | 7,815 | 8,148 | 7,179 | 7,737(456) |
|  | BIC | 8,312 | 7,485 | 7,942 | 8,274 | 7,305 | 7,864(456) |

## fluency

Gender = *female*; Process (a) = *grip*; Process (b) = *fluency*

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| ab | Covar (Levels) | 13.64 (14.92) .36 |
| ab | Covar (Slopes) | 0.24 (0.27) .38 |
| ab | Covar (Residuals) | 9.98 (5.52) .07 |
| er | Corr (Levels) | 0.10 (0.11) .35 |
| er | Corr (Slopes) | 0.58 (0.72) .43 |
| er | Corr (Residuals) | 0.15 (0.08) .06 |
| a | Level | 88.57 (13.39) <.01 |
| a | Slope | -7.09 (2.24) <.01 |
| a | Level \* age | 2.91 (1.79) .10 |
| a | Level \* education | -3.03 (3.51) .39 |
| a | Level \* height | 0.63 (0.32) .05 |
| a | Level \* smoking | -4.99 (3.80) .19 |
| a | Level \* cardio | 1.84 (4.34) .67 |
| a | Level \* diabetes | --- |
| a | Slope \* age | -0.63 (0.31) .04 |
| a | Slope \* education | 0.62 (0.49) .21 |
| a | Slope \* height | -0.01 (0.04) .73 |
| a | Slope \* smoking | 0.36 (0.55) .51 |
| a | Slope \* cardio | -0.12 (0.64) .85 |
| a | Slope \* diabetes | --- |
| b | Level | 24.11 (5.14) <.01 |
| b | Slope | -0.17 (0.49) .72 |
| b | Level \* age | -0.68 (0.71) .33 |
| b | Level \* education | 6.28 (1.29) <.01 |
| b | Level \* height | -0.04 (0.11) .73 |
| b | Level \* smoking | 0.15 (1.24) .90 |
| b | Level \* cardio | -0.96 (1.42) .50 |
| b | Level \* diabetes | --- |
| b | Slope \* age | -0.01 (0.07) .92 |
| b | Slope \* education | 0.13 (0.12) .30 |
| b | Slope \* height | 0.01 (0.01) .35 |
| b | Slope \* smoking | 0.01 (0.12) .95 |
| b | Slope \* cardio | -0.01 (0.14) .96 |
| b | Slope \* diabetes | --- |
| a | Var (Level) | 417.16 (69.34) <.01 |
| a | Var (Slope) | 4.90 (1.39) <.01 |
| a | Var (Residual) | 171.91 (21.21) <.01 |
| b | Var (Level) | 42.57 (6.49) <.01 |
| b | Var (Slope) | 0.04 (0.08) .64 |
| b | Var (Residual) | 25.70 (2.52) <.01 |
| a | Covar (Level, Slope) | -44.58 (8.78) <.01 |
| b | Covar (Level, Slope) | -0.29 (0.58) .61 |
|  | Correlation of Levels | 0.10 |
|  | Correlation of Slopes | 0.57 |
|  | Correlation of Residuals | 0.15 |
|  | N | 225 |
|  | occasions | 3 |
|  | parameters | 37 |
|  | LL | -4,056 |
|  | AIC | 8,186 |
|  | BIC | 8,312 |

## piccomp

Gender = *female*; Process (a) = *grip*; Process (b) = *piccomp*

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| ab | Covar (Levels) | 2.07 (6.71) .76 |
| ab | Covar (Slopes) | 0.07 (0.12) .57 |
| ab | Covar (Residuals) | 0.36 (2.76) .90 |
| er | Corr (Levels) | 0.04 (0.12) .76 |
| er | Corr (Slopes) | 0.26 (0.48) .59 |
| er | Corr (Residuals) | 0.01 (0.08) .90 |
| a | Level | 87.42 (13.96) <.01 |
| a | Slope | -6.43 (2.32) .01 |
| a | Level \* age | 2.76 (1.89) .14 |
| a | Level \* education | -3.05 (3.59) .40 |
| a | Level \* height | 0.63 (0.32) .05 |
| a | Level \* smoking | -4.92 (3.80) .20 |
| a | Level \* cardio | 2.02 (4.37) .64 |
| a | Level \* diabetes | --- |
| a | Slope \* age | -0.55 (0.32) .09 |
| a | Slope \* education | 0.64 (0.49) .20 |
| a | Slope \* height | -0.02 (0.04) .69 |
| a | Slope \* smoking | 0.32 (0.54) .55 |
| a | Slope \* cardio | -0.18 (0.64) .78 |
| a | Slope \* diabetes | --- |
| b | Level | 9.21 (2.25) <.01 |
| b | Slope | 0.33 (0.27) .22 |
| b | Level \* age | -0.19 (0.31) .54 |
| b | Level \* education | 2.26 (0.63) <.01 |
| b | Level \* height | -0.01 (0.04) .74 |
| b | Level \* smoking | -0.76 (0.53) .15 |
| b | Level \* cardio | -0.43 (0.61) .48 |
| b | Level \* diabetes | --- |
| b | Slope \* age | 0.06 (0.04) .10 |
| b | Slope \* education | 0.02 (0.07) .74 |
| b | Slope \* height | 0.01 (0.01) .13 |
| b | Slope \* smoking | 0.05 (0.07) .42 |
| b | Slope \* cardio | 0.04 (0.07) .62 |
| b | Slope \* diabetes | --- |
| a | Var (Level) | 413.40 (71.10) <.01 |
| a | Var (Slope) | 4.70 (1.39) <.01 |
| a | Var (Residual) | 173.83 (22.57) <.01 |
| b | Var (Level) | 7.47 (1.55) <.01 |
| b | Var (Slope) | 0.01 (0.01) .33 |
| b | Var (Residual) | 6.49 (0.67) <.01 |
| a | Covar (Level, Slope) | -43.59 (8.87) <.01 |
| b | Covar (Level, Slope) | -0.03 (0.12) .78 |
|  | Correlation of Levels | 0.037 |
|  | Correlation of Slopes | 0.260 |
|  | Correlation of Residuals | 0.011 |
|  | N | 225 |
|  | occasions | 3 |
|  | parameters | 37 |
|  | LL | -3,642 |
|  | AIC | 7,359 |
|  | BIC | 7,485 |

## spatial\_ab

Gender = *female*; Process (a) = *grip*; Process (b) = *spatial\_ab*

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| ab | Covar (Levels) | 0.80 (11.07) .94 |
| ab | Covar (Slopes) | 0.08 (0.16) .59 |
| ab | Covar (Residuals) | -0.37 (3.83) .92 |
| er | Corr (Levels) | 0.01 (0.10) .94 |
| er | Corr (Slopes) | 0.37 (0.79) .64 |
| er | Corr (Residuals) | -0.01 (0.09) .92 |
| a | Level | 87.30 (13.77) <.01 |
| a | Slope | -6.36 (2.30) .01 |
| a | Level \* age | 2.75 (1.86) .14 |
| a | Level \* education | -3.02 (3.53) .39 |
| a | Level \* height | 0.63 (0.32) .05 |
| a | Level \* smoking | -4.90 (3.75) .19 |
| a | Level \* cardio | 2.04 (4.27) .63 |
| a | Level \* diabetes | --- |
| a | Slope \* age | -0.54 (0.32) .09 |
| a | Slope \* education | 0.62 (0.48) .20 |
| a | Slope \* height | -0.01 (0.04) .73 |
| a | Slope \* smoking | 0.31 (0.54) .57 |
| a | Slope \* cardio | -0.19 (0.61) .75 |
| a | Slope \* diabetes | --- |
| b | Level | 11.11 (3.84) <.01 |
| b | Slope | 0.06 (0.30) .83 |
| b | Level \* age | -1.15 (0.52) .03 |
| b | Level \* education | 3.44 (1.03) <.01 |
| b | Level \* height | 0.06 (0.08) .49 |
| b | Level \* smoking | -0.55 (0.94) .56 |
| b | Level \* cardio | -0.78 (1.04) .45 |
| b | Level \* diabetes | --- |
| b | Slope \* age | 0.04 (0.04) .37 |
| b | Slope \* education | 0.17 (0.09) .06 |
| b | Slope \* height | -0.02 (0.01) .02 |
| b | Slope \* smoking | -0.08 (0.08) .35 |
| b | Slope \* cardio | -0.08 (0.08) .31 |
| b | Slope \* diabetes | --- |
| a | Var (Level) | 411.65 (70.06) <.01 |
| a | Var (Slope) | 4.58 (1.38) <.01 |
| a | Var (Residual) | 174.94 (22.65) <.01 |
| b | Var (Level) | 29.82 (4.37) <.01 |
| b | Var (Slope) | 0.01 (0.03) .70 |
| b | Var (Residual) | 11.30 (0.90) <.01 |
| a | Covar (Level, Slope) | -43.02 (8.92) <.01 |
| b | Covar (Level, Slope) | 0.07 (0.29) .80 |
|  | Correlation of Levels | 0.0072 |
|  | Correlation of Slopes | 0.3744 |
|  | Correlation of Residuals | -0.0083 |
|  | N | 225 |
|  | occasions | 3 |
|  | parameters | 37 |
|  | LL | -3,871 |
|  | AIC | 7,815 |
|  | BIC | 7,942 |

## symbol

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

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| ab | Covar (Levels) | -48.56 (20.52) .02 |
| ab | Covar (Slopes) | 0.12 (0.17) .48 |
| ab | Covar (Residuals) | -0.64 (3.70) .86 |
| er | Corr (Levels) | -0.25 (0.09) .01 |
| er | Corr (Slopes) | 0.21 (0.30) .48 |
| er | Corr (Residuals) | -0.01 (0.07) .86 |
| a | Level | 87.55 (13.55) <.01 |
| a | Slope | -6.55 (2.21) <.01 |
| a | Level \* age | 2.78 (1.82) .13 |
| a | Level \* education | -3.04 (3.57) .39 |
| a | Level \* height | 0.64 (0.32) .05 |
| a | Level \* smoking | -4.87 (3.79) .20 |
| a | Level \* cardio | 1.98 (4.37) .65 |
| a | Level \* diabetes | --- |
| a | Slope \* age | -0.56 (0.31) .07 |
| a | Slope \* education | 0.65 (0.50) .19 |
| a | Slope \* height | -0.01 (0.04) .74 |
| a | Slope \* smoking | 0.32 (0.54) .55 |
| a | Slope \* cardio | -0.14 (0.63) .82 |
| a | Slope \* diabetes | --- |
| b | Level | 38.18 (6.49) <.01 |
| b | Slope | 0.02 (0.37) .96 |
| b | Level \* age | -0.62 (0.90) .49 |
| b | Level \* education | 8.90 (1.57) <.01 |
| b | Level \* height | 0.06 (0.12) .60 |
| b | Level \* smoking | -0.14 (1.51) .93 |
| b | Level \* cardio | -0.79 (1.86) .67 |
| b | Level \* diabetes | --- |
| b | Slope \* age | 0.06 (0.05) .27 |
| b | Slope \* education | -0.09 (0.10) .36 |
| b | Slope \* height | 0.00 (0.01) .49 |
| b | Slope \* smoking | -0.06 (0.10) .51 |
| b | Slope \* cardio | -0.03 (0.10) .79 |
| b | Slope \* diabetes | --- |
| a | Var (Level) | 415.13 (69.86) <.01 |
| a | Var (Slope) | 4.88 (1.40) <.01 |
| a | Var (Residual) | 173.18 (22.88) <.01 |
| b | Var (Level) | 92.85 (10.82) <.01 |
| b | Var (Slope) | 0.07 (0.05) .15 |
| b | Var (Residual) | 14.17 (1.13) <.01 |
| a | Covar (Level, Slope) | -44.44 (8.79) <.01 |
| b | Covar (Level, Slope) | -0.52 (0.64) .42 |
|  | Correlation of Levels | -0.247 |
|  | Correlation of Slopes | 0.211 |
|  | Correlation of Residuals | -0.013 |
|  | N | 225 |
|  | occasions | 3 |
|  | parameters | 37 |
|  | LL | -4,037 |
|  | AIC | 8,148 |
|  | BIC | 8,274 |

## waisgeneral

Gender = *female*; Process (a) = *grip*; Process (b) = *waisgeneral*

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| ab | Covar (Levels) | 2.20 (7.03) .75 |
| ab | Covar (Slopes) | 0.11 (0.10) .27 |
| ab | Covar (Residuals) | -1.78 (1.78) .32 |
| er | Corr (Levels) | 0.03 (0.09) .75 |
| er | Corr (Slopes) | 0.42 (0.42) .32 |
| er | Corr (Residuals) | -0.08 (0.08) .31 |
| a | Level | 87.84 (14.24) <.01 |
| a | Slope | -6.77 (2.33) <.01 |
| a | Level \* age | 2.82 (1.91) .14 |
| a | Level \* education | -3.05 (3.65) .40 |
| a | Level \* height | 0.63 (0.32) .05 |
| a | Level \* smoking | -4.94 (3.81) .19 |
| a | Level \* cardio | 1.97 (4.45) .66 |
| a | Level \* diabetes | --- |
| a | Slope \* age | -0.59 (0.32) .06 |
| a | Slope \* education | 0.65 (0.52) .21 |
| a | Slope \* height | -0.02 (0.04) .71 |
| a | Slope \* smoking | 0.34 (0.55) .53 |
| a | Slope \* cardio | -0.14 (0.65) .83 |
| a | Slope \* diabetes | --- |
| b | Level | 12.02 (2.23) <.01 |
| b | Slope | 0.34 (0.17) .05 |
| b | Level \* age | -0.08 (0.31) .80 |
| b | Level \* education | 4.27 (0.70) <.01 |
| b | Level \* height | 0.05 (0.05) .32 |
| b | Level \* smoking | -0.28 (0.59) .63 |
| b | Level \* cardio | -0.07 (0.64) .92 |
| b | Level \* diabetes | --- |
| b | Slope \* age | 0.04 (0.02) .09 |
| b | Slope \* education | -0.02 (0.05) .72 |
| b | Slope \* height | 0.00 (0.00) .54 |
| b | Slope \* smoking | 0.01 (0.05) .81 |
| b | Slope \* cardio | -0.04 (0.05) .45 |
| b | Slope \* diabetes | --- |
| a | Var (Level) | 421.01 (71.30) <.01 |
| a | Var (Slope) | 5.12 (1.43) <.01 |
| a | Var (Residual) | 167.91 (22.12) <.01 |
| b | Var (Level) | 14.13 (1.86) <.01 |
| b | Var (Slope) | 0.01 (0.01) .10 |
| b | Var (Residual) | 2.92 (0.35) <.01 |
| a | Covar (Level, Slope) | -45.40 (9.05) <.01 |
| b | Covar (Level, Slope) | -0.11 (0.11) .31 |
|  | Correlation of Levels | 0.029 |
|  | Correlation of Slopes | 0.426 |
|  | Correlation of Residuals | -0.080 |
|  | N | 225 |
|  | occasions | 3 |
|  | parameters | 37 |
|  | LL | -3,552 |
|  | AIC | 7,179 |
|  | BIC | 7,305 |

## Summary

Study = *ILSE*; Gender = *female*; Process (a) = *grip*

Computed correlations:

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Levels | fluency | 0.10 |
| Correlation of Levels | piccomp | 0.04 |
| Correlation of Levels | spatial\_ab | 0.01 |
| Correlation of Levels | symbol | -0.25 |
| Correlation of Levels | waisgeneral | 0.03 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Slopes | fluency | 0.57 |
| Correlation of Slopes | piccomp | 0.26 |
| Correlation of Slopes | spatial\_ab | 0.37 |
| Correlation of Slopes | symbol | 0.21 |
| Correlation of Slopes | waisgeneral | 0.43 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Residuals | fluency | 0.15 |
| Correlation of Residuals | piccomp | 0.01 |
| Correlation of Residuals | spatial\_ab | -0.01 |
| Correlation of Residuals | symbol | -0.01 |
| Correlation of Residuals | waisgeneral | -0.08 |

P-values for corresponding covariances:

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Levels | fluency | 0.36 |
| Covariance of Levels | piccomp | 0.76 |
| Covariance of Levels | spatial\_ab | 0.94 |
| Covariance of Levels | symbol | 0.02 |
| Covariance of Levels | waisgeneral | 0.75 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Slopes | fluency | 0.38 |
| Covariance of Slopes | piccomp | 0.57 |
| Covariance of Slopes | spatial\_ab | 0.59 |
| Covariance of Slopes | symbol | 0.48 |
| Covariance of Slopes | waisgeneral | 0.27 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Residuals | fluency | 0.07 |
| Covariance of Residuals | piccomp | 0.90 |
| Covariance of Residuals | spatial\_ab | 0.92 |
| Covariance of Residuals | symbol | 0.86 |
| Covariance of Residuals | waisgeneral | 0.32 |

# male

Gender = *male*; Model type: *aehplus*; Process (a) = *grip*; Process (b): *fluency*, *piccomp*, *spatial\_ab*, *symbol*, *waisgeneral*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| process | label | fluency | piccomp | spatial\_ab | symbol | waisgeneral | mean(sd) |
| ab | Covar (Levels) | 9.48 (13.28) .47 | 11.62 (6.45) .07 | 18.41 (9.77) .06 | -14.22 (16.99) .40 | 7.82 (6.86) .26 | --- |
| ab | Covar (Slopes) | 0.04 (0.15) .80 | 0.08 (0.10) .43 | 0.17 (0.14) .22 | -0.04 (0.20) .85 | 0.01 (0.06) .82 | --- |
| ab | Covar (Residuals) | 13.29 (5.00) .01 | 4.11 (2.57) .11 | -1.59 (2.61) .54 | 3.40 (4.14) .41 | -0.87 (1.91) .65 | --- |
| er | Corr (Levels) | 0.07 (0.10) .47 | 0.22 (0.12) .06 | 0.18 (0.10) .06 | -0.08 (0.10) .41 | 0.12 (0.11) .25 | --- |
| er | Corr (Slopes) | 0.19 (0.76) .80 | 0.43 (0.48) .37 | 0.41 (0.33) .21 | -0.07 (0.36) .85 | 0.23 (1.11) .83 | --- |
| er | Corr (Residuals) | 0.21 (0.07) <.01 | 0.16 (0.09) .09 | -0.04 (0.07) .54 | 0.06 (0.08) .40 | -0.04 (0.08) .65 | --- |
| a | Level | 95.04 (12.78) <.01 | 94.47 (12.65) <.01 | 94.87 (12.43) <.01 | 94.64 (12.74) <.01 | 94.55 (13.16) <.01 | 94.71(0.23) |
| a | Slope | -2.83 (1.54) .07 | -2.70 (1.57) .09 | -2.82 (1.57) .07 | -2.82 (1.59) .08 | -2.64 (1.61) .10 | -2.76(0.09) |
| a | Level \* age | 0.96 (1.66) .56 | 0.88 (1.64) .59 | 0.95 (1.59) .55 | 0.90 (1.65) .58 | 0.89 (1.67) .59 | 0.92(0.04) |
| a | Level \* education | 0.98 (3.61) .79 | 0.89 (3.46) .80 | 0.98 (3.55) .78 | 0.99 (3.48) .78 | 1.02 (3.47) .77 | 0.98(0.05) |
| a | Level \* height | 0.64 (0.27) .02 | 0.63 (0.26) .01 | 0.63 (0.26) .01 | 0.64 (0.26) .02 | 0.63 (0.26) .02 | 0.63(0.00) |
| a | Level \* smoking | -3.47 (3.65) .34 | -3.45 (3.78) .36 | -3.31 (3.75) .38 | -3.36 (3.71) .36 | -3.38 (3.80) .37 | -3.39(0.07) |
| a | Level \* cardio | -2.54 (3.69) .49 | -2.54 (3.84) .51 | -2.66 (3.75) .48 | -2.55 (3.74) .50 | -2.70 (3.79) .48 | -2.60(0.08) |
| a | Level \* diabetes | --- | --- | --- | --- | --- | --- |
| a | Slope \* age | -0.07 (0.20) .74 | -0.05 (0.21) .82 | -0.07 (0.21) .76 | -0.07 (0.21) .75 | -0.04 (0.21) .85 | -0.06(0.01) |
| a | Slope \* education | 0.04 (0.51) .94 | 0.10 (0.48) .83 | 0.04 (0.49) .94 | 0.07 (0.50) .88 | 0.02 (0.51) .96 | 0.05(0.03) |
| a | Slope \* height | -0.04 (0.04) .21 | -0.05 (0.03) .16 | -0.04 (0.04) .20 | -0.05 (0.04) .17 | -0.04 (0.04) .24 | -0.04(0.00) |
| a | Slope \* smoking | 0.60 (0.47) .20 | 0.64 (0.47) .18 | 0.59 (0.47) .21 | 0.53 (0.47) .26 | 0.59 (0.48) .22 | 0.59(0.04) |
| a | Slope \* cardio | 0.57 (0.47) .23 | 0.53 (0.49) .28 | 0.57 (0.51) .26 | 0.53 (0.52) .31 | 0.60 (0.49) .22 | 0.56(0.03) |
| a | Slope \* diabetes | --- | --- | --- | --- | --- | --- |
| b | Level | 23.80 (4.66) <.01 | 11.52 (1.89) <.01 | 21.61 (3.19) <.01 | 37.53 (5.56) <.01 | 14.29 (2.14) <.01 | --- |
| b | Slope | -0.08 (0.46) .87 | 0.03 (0.22) .88 | -0.76 (0.32) .02 | 0.02 (0.52) .98 | 0.04 (0.18) .85 | --- |
| b | Level \* age | -0.32 (0.66) .62 | -0.01 (0.26) .98 | 0.05 (0.45) .92 | -0.06 (0.75) .94 | -0.24 (0.30) .43 | --- |
| b | Level \* education | 5.43 (1.20) <.01 | 1.91 (0.60) <.01 | 3.47 (0.90) <.01 | 8.78 (1.47) <.01 | 3.46 (0.68) <.01 | --- |
| b | Level \* height | 0.15 (0.09) .10 | 0.04 (0.04) .27 | 0.08 (0.07) .22 | 0.19 (0.10) .06 | 0.02 (0.04) .65 | --- |
| b | Level \* smoking | -0.52 (1.29) .68 | 0.43 (0.50) .39 | -0.19 (0.90) .83 | 0.10 (1.54) .95 | -0.33 (0.58) .57 | --- |
| b | Level \* cardio | 0.51 (1.24) .68 | -0.19 (0.48) .69 | -0.41 (0.85) .63 | -0.45 (1.49) .76 | 0.73 (0.55) .19 | --- |
| b | Level \* diabetes | --- | --- | --- | --- | --- | --- |
| b | Slope \* age | 0.01 (0.06) .89 | -0.01 (0.03) .83 | -0.06 (0.05) .16 | 0.06 (0.07) .40 | 0.01 (0.02) .79 | --- |
| b | Slope \* education | 0.00 (0.12) .98 | -0.07 (0.06) .22 | -0.06 (0.10) .54 | -0.06 (0.11) .59 | -0.06 (0.05) .20 | --- |
| b | Slope \* height | -0.01 (0.01) .37 | 0.00 (0.00) .90 | 0.01 (0.01) .34 | -0.00 (0.01) .61 | 0.00 (0.00) .29 | --- |
| b | Slope \* smoking | -0.04 (0.12) .73 | -0.07 (0.06) .26 | 0.12 (0.09) .15 | -0.01 (0.12) .92 | 0.03 (0.04) .48 | --- |
| b | Slope \* cardio | 0.11 (0.13) .43 | -0.04 (0.05) .40 | 0.04 (0.10) .73 | -0.03 (0.12) .79 | -0.06 (0.04) .19 | --- |
| b | Slope \* diabetes | --- | --- | --- | --- | --- | --- |
| a | Var (Level) | 358.95 (52.22) <.01 | 360.66 (53.39) <.01 | 361.65 (52.57) <.01 | 363.30 (53.06) <.01 | 358.28 (53.00) <.01 | 360.57(2.03) |
| a | Var (Slope) | 1.52 (1.02) .14 | 1.63 (1.08) .13 | 1.67 (1.04) .11 | 1.72 (1.07) .11 | 1.51 (1.02) .14 | 1.61(0.09) |
| a | Var (Residual) | 176.46 (17.90) <.01 | 174.94 (19.45) <.01 | 175.08 (18.09) <.01 | 173.98 (18.18) <.01 | 176.80 (17.83) <.01 | 175.45(1.16) |
| b | Var (Level) | 46.18 (8.39) <.01 | 7.46 (1.09) <.01 | 27.62 (3.75) <.01 | 86.64 (10.38) <.01 | 11.40 (1.50) <.01 | --- |
| b | Var (Slope) | 0.03 (0.07) .73 | 0.02 (0.01) .04 | 0.10 (0.02) <.01 | 0.18 (0.06) <.01 | 0.00 (0.01) .72 | --- |
| b | Var (Residual) | 23.07 (2.46) <.01 | 3.87 (0.37) <.01 | 7.97 (0.64) <.01 | 15.55 (1.37) <.01 | 2.94 (0.26) <.01 | --- |
| a | Covar (Level, Slope) | -22.70 (6.41) <.01 | -23.20 (6.62) <.01 | -23.54 (6.38) <.01 | -23.79 (6.63) <.01 | -22.65 (6.43) <.01 | -23.18(0.50) |
| b | Covar (Level, Slope) | 0.64 (0.52) .22 | -0.02 (0.10) .85 | -0.19 (0.28) .49 | -0.23 (0.62) .72 | 0.02 (0.07) .78 | --- |
|  | Correlation of Levels | 0.074 | 0.22 | 0.184 | -0.080 | 0.122 | 0.10(0.12) |
|  | Correlation of Slopes | 0.191 | 0.43 | 0.411 | -0.067 | 0.223 | 0.24(0.20) |
|  | Correlation of Residuals | 0.208 | 0.16 | -0.043 | 0.065 | -0.038 | 0.07(0.11) |
|  | N | 252 | 252 | 252 | 252 | 252 | 252.00(0.00) |
|  | occasions | 3 | 3 | 3 | 3 | 3 | 3.00(0.00) |
|  | parameters | 37 | 37 | 37 | 37 | 37 | 37.00(0.00) |
|  | LL | -4,475 | -3,917 | -4,241 | -4,504 | -3,904 | -4,208(290) |
|  | AIC | 9,023 | 7,908 | 8,556 | 9,083 | 7,881 | 8,490(581) |
|  | BIC | 9,154 | 8,038 | 8,687 | 9,213 | 8,012 | 8,621(581) |

## fluency

Gender = *male*; Process (a) = *grip*; Process (b) = *fluency*

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| ab | Covar (Levels) | 9.48 (13.28) .47 |
| ab | Covar (Slopes) | 0.04 (0.15) .80 |
| ab | Covar (Residuals) | 13.29 (5.00) .01 |
| er | Corr (Levels) | 0.07 (0.10) .47 |
| er | Corr (Slopes) | 0.19 (0.76) .80 |
| er | Corr (Residuals) | 0.21 (0.07) <.01 |
| a | Level | 95.04 (12.78) <.01 |
| a | Slope | -2.83 (1.54) .07 |
| a | Level \* age | 0.96 (1.66) .56 |
| a | Level \* education | 0.98 (3.61) .79 |
| a | Level \* height | 0.64 (0.27) .02 |
| a | Level \* smoking | -3.47 (3.65) .34 |
| a | Level \* cardio | -2.54 (3.69) .49 |
| a | Level \* diabetes | --- |
| a | Slope \* age | -0.07 (0.20) .74 |
| a | Slope \* education | 0.04 (0.51) .94 |
| a | Slope \* height | -0.04 (0.04) .21 |
| a | Slope \* smoking | 0.60 (0.47) .20 |
| a | Slope \* cardio | 0.57 (0.47) .23 |
| a | Slope \* diabetes | --- |
| b | Level | 23.80 (4.66) <.01 |
| b | Slope | -0.08 (0.46) .87 |
| b | Level \* age | -0.32 (0.66) .62 |
| b | Level \* education | 5.43 (1.20) <.01 |
| b | Level \* height | 0.15 (0.09) .10 |
| b | Level \* smoking | -0.52 (1.29) .68 |
| b | Level \* cardio | 0.51 (1.24) .68 |
| b | Level \* diabetes | --- |
| b | Slope \* age | 0.01 (0.06) .89 |
| b | Slope \* education | 0.00 (0.12) .98 |
| b | Slope \* height | -0.01 (0.01) .37 |
| b | Slope \* smoking | -0.04 (0.12) .73 |
| b | Slope \* cardio | 0.11 (0.13) .43 |
| b | Slope \* diabetes | --- |
| a | Var (Level) | 358.95 (52.22) <.01 |
| a | Var (Slope) | 1.52 (1.02) .14 |
| a | Var (Residual) | 176.46 (17.90) <.01 |
| b | Var (Level) | 46.18 (8.39) <.01 |
| b | Var (Slope) | 0.03 (0.07) .73 |
| b | Var (Residual) | 23.07 (2.46) <.01 |
| a | Covar (Level, Slope) | -22.70 (6.41) <.01 |
| b | Covar (Level, Slope) | 0.64 (0.52) .22 |
|  | Correlation of Levels | 0.074 |
|  | Correlation of Slopes | 0.191 |
|  | Correlation of Residuals | 0.208 |
|  | N | 252 |
|  | occasions | 3 |
|  | parameters | 37 |
|  | LL | -4,475 |
|  | AIC | 9,023 |
|  | BIC | 9,154 |

## piccomp

Gender = *male*; Process (a) = *grip*; Process (b) = *piccomp*

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| ab | Covar (Levels) | 11.62 (6.45) .07 |
| ab | Covar (Slopes) | 0.08 (0.10) .43 |
| ab | Covar (Residuals) | 4.11 (2.57) .11 |
| er | Corr (Levels) | 0.22 (0.12) .06 |
| er | Corr (Slopes) | 0.43 (0.48) .37 |
| er | Corr (Residuals) | 0.16 (0.09) .09 |
| a | Level | 94.47 (12.65) <.01 |
| a | Slope | -2.70 (1.57) .09 |
| a | Level \* age | 0.88 (1.64) .59 |
| a | Level \* education | 0.89 (3.46) .80 |
| a | Level \* height | 0.63 (0.26) .01 |
| a | Level \* smoking | -3.45 (3.78) .36 |
| a | Level \* cardio | -2.54 (3.84) .51 |
| a | Level \* diabetes | --- |
| a | Slope \* age | -0.05 (0.21) .82 |
| a | Slope \* education | 0.10 (0.48) .83 |
| a | Slope \* height | -0.05 (0.03) .16 |
| a | Slope \* smoking | 0.64 (0.47) .18 |
| a | Slope \* cardio | 0.53 (0.49) .28 |
| a | Slope \* diabetes | --- |
| b | Level | 11.52 (1.89) <.01 |
| b | Slope | 0.03 (0.22) .88 |
| b | Level \* age | -0.01 (0.26) .98 |
| b | Level \* education | 1.91 (0.60) <.01 |
| b | Level \* height | 0.04 (0.04) .27 |
| b | Level \* smoking | 0.43 (0.50) .39 |
| b | Level \* cardio | -0.19 (0.48) .69 |
| b | Level \* diabetes | --- |
| b | Slope \* age | -0.01 (0.03) .83 |
| b | Slope \* education | -0.07 (0.06) .22 |
| b | Slope \* height | 0.00 (0.00) .90 |
| b | Slope \* smoking | -0.07 (0.06) .26 |
| b | Slope \* cardio | -0.04 (0.05) .40 |
| b | Slope \* diabetes | --- |
| a | Var (Level) | 360.66 (53.39) <.01 |
| a | Var (Slope) | 1.63 (1.08) .13 |
| a | Var (Residual) | 174.94 (19.45) <.01 |
| b | Var (Level) | 7.46 (1.09) <.01 |
| b | Var (Slope) | 0.02 (0.01) .04 |
| b | Var (Residual) | 3.87 (0.37) <.01 |
| a | Covar (Level, Slope) | -23.20 (6.62) <.01 |
| b | Covar (Level, Slope) | -0.02 (0.10) .85 |
|  | Correlation of Levels | 0.22 |
|  | Correlation of Slopes | 0.43 |
|  | Correlation of Residuals | 0.16 |
|  | N | 252 |
|  | occasions | 3 |
|  | parameters | 37 |
|  | LL | -3,917 |
|  | AIC | 7,908 |
|  | BIC | 8,038 |

## spatial\_ab

Gender = *male*; Process (a) = *grip*; Process (b) = *spatial\_ab*

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| ab | Covar (Levels) | 18.41 (9.77) .06 |
| ab | Covar (Slopes) | 0.17 (0.14) .22 |
| ab | Covar (Residuals) | -1.59 (2.61) .54 |
| er | Corr (Levels) | 0.18 (0.10) .06 |
| er | Corr (Slopes) | 0.41 (0.33) .21 |
| er | Corr (Residuals) | -0.04 (0.07) .54 |
| a | Level | 94.87 (12.43) <.01 |
| a | Slope | -2.82 (1.57) .07 |
| a | Level \* age | 0.95 (1.59) .55 |
| a | Level \* education | 0.98 (3.55) .78 |
| a | Level \* height | 0.63 (0.26) .01 |
| a | Level \* smoking | -3.31 (3.75) .38 |
| a | Level \* cardio | -2.66 (3.75) .48 |
| a | Level \* diabetes | --- |
| a | Slope \* age | -0.07 (0.21) .76 |
| a | Slope \* education | 0.04 (0.49) .94 |
| a | Slope \* height | -0.04 (0.04) .20 |
| a | Slope \* smoking | 0.59 (0.47) .21 |
| a | Slope \* cardio | 0.57 (0.51) .26 |
| a | Slope \* diabetes | --- |
| b | Level | 21.61 (3.19) <.01 |
| b | Slope | -0.76 (0.32) .02 |
| b | Level \* age | 0.05 (0.45) .92 |
| b | Level \* education | 3.47 (0.90) <.01 |
| b | Level \* height | 0.08 (0.07) .22 |
| b | Level \* smoking | -0.19 (0.90) .83 |
| b | Level \* cardio | -0.41 (0.85) .63 |
| b | Level \* diabetes | --- |
| b | Slope \* age | -0.06 (0.05) .16 |
| b | Slope \* education | -0.06 (0.10) .54 |
| b | Slope \* height | 0.01 (0.01) .34 |
| b | Slope \* smoking | 0.12 (0.09) .15 |
| b | Slope \* cardio | 0.04 (0.10) .73 |
| b | Slope \* diabetes | --- |
| a | Var (Level) | 361.65 (52.57) <.01 |
| a | Var (Slope) | 1.67 (1.04) .11 |
| a | Var (Residual) | 175.08 (18.09) <.01 |
| b | Var (Level) | 27.62 (3.75) <.01 |
| b | Var (Slope) | 0.10 (0.02) <.01 |
| b | Var (Residual) | 7.97 (0.64) <.01 |
| a | Covar (Level, Slope) | -23.54 (6.38) <.01 |
| b | Covar (Level, Slope) | -0.19 (0.28) .49 |
|  | Correlation of Levels | 0.184 |
|  | Correlation of Slopes | 0.411 |
|  | Correlation of Residuals | -0.043 |
|  | N | 252 |
|  | occasions | 3 |
|  | parameters | 37 |
|  | LL | -4,241 |
|  | AIC | 8,556 |
|  | BIC | 8,687 |

## symbol

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

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| ab | Covar (Levels) | -14.22 (16.99) .40 |
| ab | Covar (Slopes) | -0.04 (0.20) .85 |
| ab | Covar (Residuals) | 3.40 (4.14) .41 |
| er | Corr (Levels) | -0.08 (0.10) .41 |
| er | Corr (Slopes) | -0.07 (0.36) .85 |
| er | Corr (Residuals) | 0.06 (0.08) .40 |
| a | Level | 94.64 (12.74) <.01 |
| a | Slope | -2.82 (1.59) .08 |
| a | Level \* age | 0.90 (1.65) .58 |
| a | Level \* education | 0.99 (3.48) .78 |
| a | Level \* height | 0.64 (0.26) .02 |
| a | Level \* smoking | -3.36 (3.71) .36 |
| a | Level \* cardio | -2.55 (3.74) .50 |
| a | Level \* diabetes | --- |
| a | Slope \* age | -0.07 (0.21) .75 |
| a | Slope \* education | 0.07 (0.50) .88 |
| a | Slope \* height | -0.05 (0.04) .17 |
| a | Slope \* smoking | 0.53 (0.47) .26 |
| a | Slope \* cardio | 0.53 (0.52) .31 |
| a | Slope \* diabetes | --- |
| b | Level | 37.53 (5.56) <.01 |
| b | Slope | 0.02 (0.52) .98 |
| b | Level \* age | -0.06 (0.75) .94 |
| b | Level \* education | 8.78 (1.47) <.01 |
| b | Level \* height | 0.19 (0.10) .06 |
| b | Level \* smoking | 0.10 (1.54) .95 |
| b | Level \* cardio | -0.45 (1.49) .76 |
| b | Level \* diabetes | --- |
| b | Slope \* age | 0.06 (0.07) .40 |
| b | Slope \* education | -0.06 (0.11) .59 |
| b | Slope \* height | -0.00 (0.01) .61 |
| b | Slope \* smoking | -0.01 (0.12) .92 |
| b | Slope \* cardio | -0.03 (0.12) .79 |
| b | Slope \* diabetes | --- |
| a | Var (Level) | 363.30 (53.06) <.01 |
| a | Var (Slope) | 1.72 (1.07) .11 |
| a | Var (Residual) | 173.98 (18.18) <.01 |
| b | Var (Level) | 86.64 (10.38) <.01 |
| b | Var (Slope) | 0.18 (0.06) <.01 |
| b | Var (Residual) | 15.55 (1.37) <.01 |
| a | Covar (Level, Slope) | -23.79 (6.63) <.01 |
| b | Covar (Level, Slope) | -0.23 (0.62) .72 |
|  | Correlation of Levels | -0.080 |
|  | Correlation of Slopes | -0.067 |
|  | Correlation of Residuals | 0.065 |
|  | N | 252 |
|  | occasions | 3 |
|  | parameters | 37 |
|  | LL | -4,504 |
|  | AIC | 9,083 |
|  | BIC | 9,213 |

## waisgeneral

Gender = *male*; Process (a) = *grip*; Process (b) = *waisgeneral*

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| ab | Covar (Levels) | 7.82 (6.86) .26 |
| ab | Covar (Slopes) | 0.01 (0.06) .82 |
| ab | Covar (Residuals) | -0.87 (1.91) .65 |
| er | Corr (Levels) | 0.12 (0.11) .25 |
| er | Corr (Slopes) | 0.23 (1.11) .83 |
| er | Corr (Residuals) | -0.04 (0.08) .65 |
| a | Level | 94.55 (13.16) <.01 |
| a | Slope | -2.64 (1.61) .10 |
| a | Level \* age | 0.89 (1.67) .59 |
| a | Level \* education | 1.02 (3.47) .77 |
| a | Level \* height | 0.63 (0.26) .02 |
| a | Level \* smoking | -3.38 (3.80) .37 |
| a | Level \* cardio | -2.70 (3.79) .48 |
| a | Level \* diabetes | --- |
| a | Slope \* age | -0.04 (0.21) .85 |
| a | Slope \* education | 0.02 (0.51) .96 |
| a | Slope \* height | -0.04 (0.04) .24 |
| a | Slope \* smoking | 0.59 (0.48) .22 |
| a | Slope \* cardio | 0.60 (0.49) .22 |
| a | Slope \* diabetes | --- |
| b | Level | 14.29 (2.14) <.01 |
| b | Slope | 0.04 (0.18) .85 |
| b | Level \* age | -0.24 (0.30) .43 |
| b | Level \* education | 3.46 (0.68) <.01 |
| b | Level \* height | 0.02 (0.04) .65 |
| b | Level \* smoking | -0.33 (0.58) .57 |
| b | Level \* cardio | 0.73 (0.55) .19 |
| b | Level \* diabetes | --- |
| b | Slope \* age | 0.01 (0.02) .79 |
| b | Slope \* education | -0.06 (0.05) .20 |
| b | Slope \* height | 0.00 (0.00) .29 |
| b | Slope \* smoking | 0.03 (0.04) .48 |
| b | Slope \* cardio | -0.06 (0.04) .19 |
| b | Slope \* diabetes | --- |
| a | Var (Level) | 358.28 (53.00) <.01 |
| a | Var (Slope) | 1.51 (1.02) .14 |
| a | Var (Residual) | 176.80 (17.83) <.01 |
| b | Var (Level) | 11.40 (1.50) <.01 |
| b | Var (Slope) | 0.00 (0.01) .72 |
| b | Var (Residual) | 2.94 (0.26) <.01 |
| a | Covar (Level, Slope) | -22.65 (6.43) <.01 |
| b | Covar (Level, Slope) | 0.02 (0.07) .78 |
|  | Correlation of Levels | 0.122 |
|  | Correlation of Slopes | 0.223 |
|  | Correlation of Residuals | -0.038 |
|  | N | 252 |
|  | occasions | 3 |
|  | parameters | 37 |
|  | LL | -3,904 |
|  | AIC | 7,881 |
|  | BIC | 8,012 |

## Summary

Study = *ILSE*; Gender = *male*; Process (a) = *grip*

Computed correlations:

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Levels | fluency | 0.07 |
| Correlation of Levels | piccomp | 0.22 |
| Correlation of Levels | spatial\_ab | 0.18 |
| Correlation of Levels | symbol | -0.08 |
| Correlation of Levels | waisgeneral | 0.12 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Slopes | fluency | 0.19 |
| Correlation of Slopes | piccomp | 0.43 |
| Correlation of Slopes | spatial\_ab | 0.41 |
| Correlation of Slopes | symbol | -0.07 |
| Correlation of Slopes | waisgeneral | 0.22 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Residuals | fluency | 0.21 |
| Correlation of Residuals | piccomp | 0.16 |
| Correlation of Residuals | spatial\_ab | -0.04 |
| Correlation of Residuals | symbol | 0.07 |
| Correlation of Residuals | waisgeneral | -0.04 |

P-values for corresponding covariances:

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Levels | fluency | 0.47 |
| Covariance of Levels | piccomp | 0.07 |
| Covariance of Levels | spatial\_ab | 0.06 |
| Covariance of Levels | symbol | 0.40 |
| Covariance of Levels | waisgeneral | 0.26 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Slopes | fluency | 0.80 |
| Covariance of Slopes | piccomp | 0.43 |
| Covariance of Slopes | spatial\_ab | 0.22 |
| Covariance of Slopes | symbol | 0.85 |
| Covariance of Slopes | waisgeneral | 0.82 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Residuals | fluency | 0.01 |
| Covariance of Residuals | piccomp | 0.11 |
| Covariance of Residuals | spatial\_ab | 0.54 |
| Covariance of Residuals | symbol | 0.41 |
| Covariance of Residuals | waisgeneral | 0.65 |

#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