HRS : Seed Report

Date: 2018-12-21

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

# Available models

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

|  |  |  |
| --- | --- | --- |
| process\_a | process\_b | n\_models |
| pef | serial7 | 6 |
| pef | word\_de | 6 |
| pef | word\_im | 6 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| study\_name | subgroup | model\_type | process\_a | process\_b | n\_models |
| hrs | female | a | pef | serial7 | 1 |
| hrs | female | a | pef | word\_de | 1 |
| hrs | female | a | pef | word\_im | 1 |
| hrs | female | aeh | pef | serial7 | 1 |
| hrs | female | aeh | pef | word\_de | 1 |
| hrs | female | aeh | pef | word\_im | 1 |
| hrs | female | aehplus | pef | serial7 | 1 |
| hrs | female | aehplus | pef | word\_de | 1 |
| hrs | female | aehplus | pef | word\_im | 1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| study\_name | subgroup | model\_type | process\_a | process\_b | n\_models |
| hrs | male | a | pef | serial7 | 1 |
| hrs | male | a | pef | word\_de | 1 |
| hrs | male | a | pef | word\_im | 1 |
| hrs | male | aeh | pef | serial7 | 1 |
| hrs | male | aeh | pef | word\_de | 1 |
| hrs | male | aeh | pef | word\_im | 1 |
| hrs | male | aehplus | pef | serial7 | 1 |
| hrs | male | aehplus | pef | word\_de | 1 |
| hrs | male | aehplus | pef | word\_im | 1 |

# female

Gender = *female*; Model type: *aehplus*; Process (a) = *pef*; Process (b): *serial7*, *word\_de*, *word\_im*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | serial7 | word\_de | word\_im | mean(sd) |
| ab | Covar (Levels) | 9.13 (1.94) <.01 | 22.08 (2.27) <.01 | 18.90 (1.80) <.01 | — |
| ab | Covar (Slopes) | 0.16 (0.05) <.01 | 0.10 (0.05) .04 | 0.04 (0.04) .30 | — |
|  | Covar (Residuals) | — | — | — | — |
| er | Corr (Levels) | 0.13 (0.03) <.01 | 0.28 (0.03) <.01 | 0.31 (0.03) <.01 | — |
| er | Corr (Slopes) | 0.38 (0.13) <.01 | 0.69 (0.50) .17 | 0.44 (0.55) .43 | — |
| er | Corr (Residuals) | -0.02 (0.02) .22 | 0.04 (0.02) .05 | 0.04 (0.02) .04 | — |
| a | Level | 247.33 (2.82) <.01 | 247.23 (2.82) <.01 | 247.17 (2.82) <.01 | 247.24(0.08) |
| a | Slope | -2.77 (0.41) <.01 | -2.75 (0.41) <.01 | -2.78 (0.41) <.01 | -2.77(0.01) |
| a | Level \* age | -3.42 (0.12) <.01 | -3.43 (0.12) <.01 | -3.43 (0.12) <.01 | -3.42(0.00) |
| a | Level \* education | 6.00 (0.39) <.01 | 6.00 (0.39) <.01 | 6.01 (0.39) <.01 | 6.00(0.00) |
| a | Level \* height | 1.85 (0.18) <.01 | 1.84 (0.18) <.01 | 1.84 (0.18) <.01 | 1.84(0.01) |
| a | Level \* smoking | -17.57 (2.30) <.01 | -17.64 (2.30) <.01 | -17.64 (2.30) <.01 | -17.61(0.04) |
| a | Level \* cardio | -10.39 (2.94) <.01 | -10.47 (2.94) <.01 | -10.42 (2.94) <.01 | -10.42(0.04) |
| a | Level \* diabetes | -10.17 (3.03) <.01 | -9.98 (3.03) <.01 | -9.92 (3.03) <.01 | -10.02(0.13) |
| a | Slope \* age | -0.19 (0.02) <.01 | -0.19 (0.02) <.01 | -0.19 (0.02) <.01 | -0.19(0.00) |
| a | Slope \* education | -0.08 (0.06) .13 | -0.08 (0.06) .16 | -0.08 (0.06) .14 | -0.08(0.00) |
| a | Slope \* height | 0.01 (0.02) .60 | 0.02 (0.02) .50 | 0.01 (0.02) .55 | 0.01(0.00) |
| a | Slope \* smoking | -0.97 (0.29) <.01 | -0.90 (0.29) <.01 | -0.90 (0.29) <.01 | -0.92(0.04) |
| a | Slope \* cardio | -0.05 (0.41) .91 | 0.00 (0.41) .99 | 0.01 (0.41) .98 | -0.01(0.03) |
| a | Slope \* diabetes | 0.30 (0.42) .48 | 0.26 (0.42) .54 | 0.25 (0.42) .55 | 0.27(0.02) |
| b | Level | 2.66 (0.06) <.01 | 3.45 (0.06) <.01 | 4.59 (0.05) <.01 | — |
| b | Slope | -0.11 (0.01) <.01 | -0.08 (0.01) <.01 | -0.08 (0.01) <.01 | — |
| b | Level \* age | -0.00 (0.00) .40 | -0.06 (0.00) <.01 | -0.05 (0.00) <.01 | — |
| b | Level \* education | 0.18 (0.01) <.01 | 0.18 (0.01) <.01 | 0.17 (0.01) <.01 | — |
| b | Level \* height | 0.01 (0.00) .02 | 0.01 (0.00) .15 | 0.00 (0.00) .26 | — |
| b | Level \* smoking | -0.07 (0.05) .10 | 0.09 (0.05) .08 | 0.06 (0.04) .12 | — |
| b | Level \* cardio | -0.00 (0.06) .93 | -0.24 (0.06) <.01 | -0.14 (0.05) .01 | — |
| b | Level \* diabetes | -0.20 (0.06) <.01 | -0.31 (0.07) <.01 | -0.21 (0.05) <.01 | — |
| b | Slope \* age | -0.01 (0.00) <.01 | -0.00 (0.00) <.01 | -0.00 (0.00) <.01 | — |
| b | Slope \* education | 0.00 (0.00) .80 | 0.00 (0.00) .82 | 0.00 (0.00) .82 | — |
| b | Slope \* height | 0.00 (0.00) .91 | 0.00 (0.00) .82 | 0.00 (0.00) .85 | — |
| b | Slope \* smoking | -0.02 (0.01) .04 | -0.01 (0.01) .07 | -0.01 (0.01) .15 | — |
| b | Slope \* cardio | -0.04 (0.01) <.01 | 0.00 (0.01) .99 | 0.00 (0.01) .97 | — |
| b | Slope \* diabetes | -0.02 (0.01) .06 | -0.02 (0.01) .05 | -0.02 (0.01) .03 | — |
| a | Var (Level) | 4157.07 (132.91) <.01 | 4170.08 (133.03) <.01 | 4164.41 (132.99) <.01 | 4163.85(6.53) |
| a | Var (Slope) | 10.27 (2.83) <.01 | 10.53 (2.82) <.01 | 10.28 (2.82) <.01 | 10.36(0.15) |
|  | Var (Residual) | — | — | — | — |
| b | Var (Level) | 1.13 (0.05) <.01 | 1.50 (0.08) <.01 | 0.87 (0.06) <.01 | — |
| b | Var (Slope) | 0.02 (0.00) <.01 | 0.00 (0.00) .36 | 0.00 (0.00) .57 | — |
|  | Var (Residual) | — | — | — | — |
| a | Covar (Level, Slope) | -20.86 (14.99) .16 | -23.02 (15.01) .12 | -21.27 (14.97) .16 | -21.71(1.15) |
| b | Covar (Level, Slope) | -0.02 (0.01) <.01 | 0.00 (0.01) .72 | 0.01 (0.01) .48 | — |
|  | Correlation of Levels | 0.13 | 0.28 | 0.31 | 0.24(0.10) |
|  | Correlation of Slopes | 0.38 | 0.70 | 0.44 | 0.51(0.17) |
|  | Correlation of Residuals | NA | NA | NA | — |
|  | N | 4,608 | 4,611 | 4,612 | 4610.33(2.08) |
|  | occasions | 3 | 3 | 3 | 3.00(0.00) |
|  | parameters | 41 | 41 | 41 | 41.00(0.00) |
|  | LL | -78,502 | -80,073 | -78,004 | -7.885982e+04(1,080) |
|  | AIC | 157,087 | 160,228 | 156,090 | 1.578016e+05(2,160) |
|  | BIC | 157,350 | 160,492 | 156,354 | 1.580655e+05(2,160) |

## serial7

Gender = *female*; Process (a) = *pef*; Process (b) = *serial7*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| process | label | a | aeh | aehplus |
| ab | Covar (Levels) | 16.89 (308.48) .96 | 7.26 (312.34) .98 | 9.13 (1.94) <.01 |
| ab | Covar (Slopes) | 0.21 (16.54) .99 | 0.20 (16.59) .99 | 0.16 (0.05) <.01 |
|  | Covar (Residuals) | — | — | — |
| er | Corr (Levels) | — | — | 0.13 (0.03) <.01 |
| er | Corr (Slopes) | — | — | 0.38 (0.13) <.01 |
| er | Corr (Residuals) | — | — | -0.02 (0.02) .22 |
| a | Level | 274.85 (2.75) <.01 | 248.48 (5.60) <.01 | 247.33 (2.82) <.01 |
| a | Slope | -2.67 (0.62) <.01 | -2.21 (1.33) .10 | -2.77 (0.41) <.01 |
| a | Level \* age | -3.82 (0.23) <.01 | -3.55 (0.23) <.01 | -3.42 (0.12) <.01 |
| a | Level \* education | — | 4.71 (0.90) <.01 | 6.00 (0.39) <.01 |
| a | Level \* height | — | 93.44 (45.99) .04 | 1.85 (0.18) <.01 |
| a | Level \* smoking | — | — | -17.57 (2.30) <.01 |
| a | Level \* cardio | — | — | -10.39 (2.94) <.01 |
| a | Level \* diabetes | — | — | -10.17 (3.03) <.01 |
| a | Slope \* age | -0.25 (0.05) <.01 | -0.25 (0.06) <.01 | -0.19 (0.02) <.01 |
| a | Slope \* education | — | -0.09 (0.21) .66 | -0.08 (0.06) .13 |
| a | Slope \* height | — | 5.86 (8.19) .47 | 0.01 (0.02) .60 |
| a | Slope \* smoking | — | — | -0.97 (0.29) <.01 |
| a | Slope \* cardio | — | — | -0.05 (0.41) .91 |
| a | Slope \* diabetes | — | — | 0.30 (0.42) .48 |
| b | Level | 3.46 (0.06) <.01 | 2.25 (0.13) <.01 | 2.66 (0.06) <.01 |
| b | Slope | -0.15 (0.01) <.01 | -0.11 (0.02) <.01 | -0.11 (0.01) <.01 |
| b | Level \* age | -0.02 (0.00) <.01 | -0.01 (0.00) .10 | -0.00 (0.00) .40 |
| b | Level \* education | — | 0.22 (0.02) <.01 | 0.18 (0.01) <.01 |
| b | Level \* height | — | 0.88 (0.90) .33 | 0.01 (0.00) .02 |
| b | Level \* smoking | — | — | -0.07 (0.05) .10 |
| b | Level \* cardio | — | — | -0.00 (0.06) .93 |
| b | Level \* diabetes | — | — | -0.20 (0.06) <.01 |
| b | Slope \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| b | Slope \* education | — | -0.01 (0.00) .03 | 0.00 (0.00) .80 |
| b | Slope \* height | — | 0.17 (0.12) .17 | 0.00 (0.00) .91 |
| b | Slope \* smoking | — | — | -0.02 (0.01) .04 |
| b | Slope \* cardio | — | — | -0.04 (0.01) <.01 |
| b | Slope \* diabetes | — | — | -0.02 (0.01) .06 |
| a | Var (Level) | 5221.29 (286.71) <.01 | 4967.41 (277.29) <.01 | 4157.07 (132.91) <.01 |
| a | Var (Slope) | 201.39 (29.59) <.01 | 200.95 (29.55) <.01 | 10.27 (2.83) <.01 |
|  | Var (Residual) | — | — | — |
| b | Var (Level) | 0.19 (3.97) .96 | 0.14 (3.52) .97 | 1.13 (0.05) <.01 |
| b | Var (Slope) | 0.01 (0.26) .98 | 0.01 (0.26) .98 | 0.02 (0.00) <.01 |
|  | Var (Residual) | — | — | — |
| a | Covar (Level, Slope) | -324.33 (55.22) <.01 | -323.22 (55.43) <.01 | -20.86 (14.99) .16 |
| b | Covar (Level, Slope) | -0.02 (0.60) .98 | -0.02 (0.58) .98 | -0.02 (0.01) <.01 |
|  | Correlation of Levels | 0.54 | 0.28 | 0.13 |
|  | Correlation of Slopes | 0.19 | 0.18 | 0.38 |
|  | Correlation of Residuals | NA | NA | NA |
|  | N | 715 | 715 | 4,608 |
|  | occasions | 5 | 5 | 3 |
|  | parameters | 20 | 28 | 41 |
|  | LL | -25,181 | -25,159 | -78,502 |
|  | AIC | 50,402 | 50,374 | 157,087 |
|  | BIC | 50,493 | 50,502 | 157,350 |

## word\_de

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| process | label | a | aeh | aehplus |
| ab | Covar (Levels) | 23.85 (2160.11) .99 | 16.56 (34.73) .63 | 22.08 (2.27) <.01 |
| ab | Covar (Slopes) | 0.23 (37.51) .99 | 0.20 (12.73) .99 | 0.10 (0.05) .04 |
|  | Covar (Residuals) | — | — | — |
| er | Corr (Levels) | — | — | 0.28 (0.03) <.01 |
| er | Corr (Slopes) | — | — | 0.69 (0.50) .17 |
| er | Corr (Residuals) | — | — | 0.04 (0.02) .05 |
| a | Level | 274.85 (2.76) <.01 | 248.50 (5.61) <.01 | 247.23 (2.82) <.01 |
| a | Slope | -2.67 (0.59) <.01 | -2.23 (1.30) .09 | -2.75 (0.41) <.01 |
| a | Level \* age | -3.82 (0.23) <.01 | -3.55 (0.23) <.01 | -3.43 (0.12) <.01 |
| a | Level \* education | — | 4.70 (0.90) <.01 | 6.00 (0.39) <.01 |
| a | Level \* height | — | 93.45 (46.01) .04 | 1.84 (0.18) <.01 |
| a | Level \* smoking | — | — | -17.64 (2.30) <.01 |
| a | Level \* cardio | — | — | -10.47 (2.94) <.01 |
| a | Level \* diabetes | — | — | -9.98 (3.03) <.01 |
| a | Slope \* age | -0.25 (0.05) <.01 | -0.25 (0.05) <.01 | -0.19 (0.02) <.01 |
| a | Slope \* education | — | -0.09 (0.21) .67 | -0.08 (0.06) .16 |
| a | Slope \* height | — | 5.85 (8.04) .47 | 0.02 (0.02) .50 |
| a | Slope \* smoking | — | — | -0.90 (0.29) <.01 |
| a | Slope \* cardio | — | — | 0.00 (0.41) .99 |
| a | Slope \* diabetes | — | — | 0.26 (0.42) .54 |
| b | Level | 4.38 (0.81) <.01 | 3.46 (0.12) <.01 | 3.45 (0.06) <.01 |
| b | Slope | -0.08 (0.54) .89 | -0.05 (0.11) .63 | -0.08 (0.01) <.01 |
| b | Level \* age | -0.08 (0.07) .26 | -0.07 (0.01) <.01 | -0.06 (0.00) <.01 |
| b | Level \* education | — | 0.17 (0.03) <.01 | 0.18 (0.01) <.01 |
| b | Level \* height | — | 0.75 (1.10) .49 | 0.01 (0.00) .15 |
| b | Level \* smoking | — | — | 0.09 (0.05) .08 |
| b | Level \* cardio | — | — | -0.24 (0.06) <.01 |
| b | Level \* diabetes | — | — | -0.31 (0.07) <.01 |
| b | Slope \* age | -0.00 (0.04) .93 | -0.00 (0.01) .75 | -0.00 (0.00) <.01 |
| b | Slope \* education | — | -0.00 (0.01) .69 | 0.00 (0.00) .82 |
| b | Slope \* height | — | 0.05 (0.80) .95 | 0.00 (0.00) .82 |
| b | Slope \* smoking | — | — | -0.01 (0.01) .07 |
| b | Slope \* cardio | — | — | 0.00 (0.01) .99 |
| b | Slope \* diabetes | — | — | -0.02 (0.01) .05 |
| a | Var (Level) | 5191.40 (288.09) <.01 | 4937.58 (276.53) <.01 | 4170.08 (133.03) <.01 |
| a | Var (Slope) | 186.07 (27.73) <.01 | 185.49 (27.68) <.01 | 10.53 (2.82) <.01 |
|  | Var (Residual) | — | — | — |
| b | Var (Level) | 0.28 (19.48) .99 | 0.22 (4.33) .96 | 1.50 (0.08) <.01 |
| b | Var (Slope) | 0.01 (0.30) .98 | 0.01 (0.29) .98 | 0.00 (0.00) .36 |
|  | Var (Residual) | — | — | — |
| a | Covar (Level, Slope) | -309.62 (53.25) <.01 | -308.55 (53.51) <.01 | -23.02 (15.01) .12 |
| b | Covar (Level, Slope) | -0.02 (3.14) .99 | -0.02 (0.70) .97 | 0.00 (0.01) .72 |
|  | Correlation of Levels | 0.62 | 0.50 | 0.28 |
|  | Correlation of Slopes | 0.20 | 0.18 | 0.70 |
|  | Correlation of Residuals | NA | NA | NA |
|  | N | 715 | 715 | 4,611 |
|  | occasions | 5 | 5 | 3 |
|  | parameters | 20 | 28 | 41 |
|  | LL | -23,567 | -23,546 | -80,073 |
|  | AIC | 47,173 | 47,148 | 160,228 |
|  | BIC | 47,265 | 47,276 | 160,492 |

## word\_im

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| process | label | a | aeh | aehplus |
| ab | Covar (Levels) | 22.67 (292.29) .94 | 15.93 (870.74) .98 | 18.90 (1.80) <.01 |
| ab | Covar (Slopes) | 0.13 (31.45) .99 | 0.10 (32.23) .99 | 0.04 (0.04) .30 |
|  | Covar (Residuals) | — | — | — |
| er | Corr (Levels) | — | — | 0.31 (0.03) <.01 |
| er | Corr (Slopes) | — | — | 0.44 (0.55) .43 |
| er | Corr (Residuals) | — | — | 0.04 (0.02) .04 |
| a | Level | 274.85 (2.78) <.01 | 248.50 (5.61) <.01 | 247.17 (2.82) <.01 |
| a | Slope | -2.67 (0.59) <.01 | -2.23 (1.30) .09 | -2.78 (0.41) <.01 |
| a | Level \* age | -3.82 (0.23) <.01 | -3.55 (0.23) <.01 | -3.43 (0.12) <.01 |
| a | Level \* education | — | 4.70 (0.90) <.01 | 6.01 (0.39) <.01 |
| a | Level \* height | — | 93.45 (46.01) .04 | 1.84 (0.18) <.01 |
| a | Level \* smoking | — | — | -17.64 (2.30) <.01 |
| a | Level \* cardio | — | — | -10.42 (2.94) <.01 |
| a | Level \* diabetes | — | — | -9.92 (3.03) <.01 |
| a | Slope \* age | -0.25 (0.05) <.01 | -0.25 (0.05) <.01 | -0.19 (0.02) <.01 |
| a | Slope \* education | — | -0.09 (0.21) .67 | -0.08 (0.06) .14 |
| a | Slope \* height | — | 5.85 (8.04) .47 | 0.01 (0.02) .55 |
| a | Slope \* smoking | — | — | -0.90 (0.29) <.01 |
| a | Slope \* cardio | — | — | 0.01 (0.41) .98 |
| a | Slope \* diabetes | — | — | 0.25 (0.42) .55 |
| b | Level | 5.51 (0.61) <.01 | 4.65 (0.10) <.01 | 4.59 (0.05) <.01 |
| b | Slope | -0.09 (0.63) .89 | -0.09 (0.26) .74 | -0.08 (0.01) <.01 |
| b | Level \* age | -0.06 (0.05) .27 | -0.05 (0.03) .06 | -0.05 (0.00) <.01 |
| b | Level \* education | — | 0.15 (0.06) .01 | 0.17 (0.01) <.01 |
| b | Level \* height | — | 0.72 (1.67) .67 | 0.00 (0.00) .26 |
| b | Level \* smoking | — | — | 0.06 (0.04) .12 |
| b | Level \* cardio | — | — | -0.14 (0.05) .01 |
| b | Level \* diabetes | — | — | -0.21 (0.05) <.01 |
| b | Slope \* age | -0.00 (0.05) .93 | -0.00 (0.03) .89 | -0.00 (0.00) <.01 |
| b | Slope \* education | — | 0.00 (0.02) .99 | 0.00 (0.00) .82 |
| b | Slope \* height | — | 0.16 (1.92) .94 | 0.00 (0.00) .85 |
| b | Slope \* smoking | — | — | -0.01 (0.01) .15 |
| b | Slope \* cardio | — | — | 0.00 (0.01) .97 |
| b | Slope \* diabetes | — | — | -0.02 (0.01) .03 |
| a | Var (Level) | 5192.60 (285.59) <.01 | 4938.80 (275.67) <.01 | 4164.41 (132.99) <.01 |
| a | Var (Slope) | 186.68 (28.17) <.01 | 186.11 (28.21) <.01 | 10.28 (2.82) <.01 |
|  | Var (Residual) | — | — | — |
| b | Var (Level) | 0.26 (6.99) .97 | 0.21 (9.07) .98 | 0.87 (0.06) <.01 |
| b | Var (Slope) | 0.01 (0.29) .98 | 0.01 (0.29) .98 | 0.00 (0.00) .57 |
|  | Var (Residual) | — | — | — |
| a | Covar (Level, Slope) | -310.20 (53.40) <.01 | -309.14 (53.82) <.01 | -21.27 (14.97) .16 |
| b | Covar (Level, Slope) | -0.03 (1.47) .99 | -0.03 (0.70) .97 | 0.01 (0.01) .48 |
|  | Correlation of Levels | 0.61 | 0.496 | 0.31 |
|  | Correlation of Slopes | 0.11 | 0.084 | 0.44 |
|  | Correlation of Residuals | NA | NA | NA |
|  | N | 715 | 715 | 4,612 |
|  | occasions | 5 | 5 | 3 |
|  | parameters | 20 | 28 | 41 |
|  | LL | -23,576 | -23,555 | -78,004 |
|  | AIC | 47,191 | 47,166 | 156,090 |
|  | BIC | 47,283 | 47,294 | 156,354 |

## Summary

Study = *HRS*; Gender = *female*; Process (a) = *pef*

Computed correlations:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| label | process\_b | a | aeh | aehplus |
| Correlation of Levels | serial7 | 0.54 | 0.28 | 0.13 |
| Correlation of Levels | word\_de | 0.62 | 0.50 | 0.28 |
| Correlation of Levels | word\_im | 0.61 | 0.50 | 0.31 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| label | process\_b | a | aeh | aehplus |
| Correlation of Slopes | serial7 | 0.19 | 0.18 | 0.38 |
| Correlation of Slopes | word\_de | 0.20 | 0.18 | 0.70 |
| Correlation of Slopes | word\_im | 0.11 | 0.08 | 0.44 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| label | process\_b | a | aeh | aehplus |
| Correlation of Residuals | serial7 | 0.00 | 0.00 | -0.02 |
| Correlation of Residuals | word\_de | 0.00 | 0.00 | 0.04 |
| Correlation of Residuals | word\_im | 0.00 | 0.00 | 0.04 |

P-values for corresponding covariances:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| label | process\_b | a | aeh | aehplus |
| Covariance of Levels | serial7 | 0.96 | 0.98 | 0.00 |
| Covariance of Levels | word\_de | 0.99 | 0.63 | 0.00 |
| Covariance of Levels | word\_im | 0.94 | 0.98 | 0.00 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| label | process\_b | a | aeh | aehplus |
| Covariance of Slopes | serial7 | 0.99 | 0.99 | 0.00 |
| Covariance of Slopes | word\_de | 0.99 | 0.99 | 0.04 |
| Covariance of Slopes | word\_im | 1.00 | 1.00 | 0.30 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| label | process\_b | a | aeh | aehplus |
| Covariance of Residuals | serial7 | 0.33 | 0.50 | 0.22 |
| Covariance of Residuals | word\_de | 0.16 | 0.22 | 0.05 |
| Covariance of Residuals | word\_im | 0.14 | 0.19 | 0.04 |

# male

Gender = *male*; Model type: *aehplus*; Process (a) = *pef*; Process (b): *serial7*, *word\_de*, *word\_im*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | serial7 | word\_de | word\_im | mean(sd) |
| ab | Covar (Levels) | 13.68 (3.34) <.01 | 30.33 (3.72) <.01 | 23.98 (3.09) <.01 | — |
| ab | Covar (Slopes) | 0.15 (0.09) .10 | 0.15 (0.08) .07 | 0.05 (0.07) .47 | — |
|  | Covar (Residuals) | — | — | — | — |
| er | Corr (Levels) | 0.16 (0.04) <.01 | 0.27 (0.03) <.01 | 0.26 (0.03) <.01 | — |
| er | Corr (Slopes) | 0.21 (0.13) .10 | 0.70 (0.54) .19 | 0.37 (0.59) .53 | — |
| er | Corr (Residuals) | 0.03 (0.03) .24 | 0.03 (0.02) .28 | 0.04 (0.02) .12 | — |
| a | Level | 369.01 (5.86) <.01 | 368.41 (5.86) <.01 | 368.44 (5.86) <.01 | 368.62(0.34) |
| a | Slope | -3.71 (0.84) <.01 | -3.41 (0.83) <.01 | -3.43 (0.83) <.01 | -3.52(0.16) |
| a | Level \* age | -4.28 (0.22) <.01 | -4.29 (0.22) <.01 | -4.29 (0.22) <.01 | -4.29(0.01) |
| a | Level \* education | 7.95 (0.67) <.01 | 7.97 (0.67) <.01 | 7.97 (0.67) <.01 | 7.96(0.01) |
| a | Level \* height | 3.30 (0.30) <.01 | 3.29 (0.30) <.01 | 3.29 (0.30) <.01 | 3.29(0.00) |
| a | Level \* smoking | -27.01 (4.49) <.01 | -26.96 (4.49) <.01 | -26.99 (4.49) <.01 | -26.99(0.03) |
| a | Level \* cardio | -18.64 (4.84) <.01 | -18.43 (4.84) <.01 | -18.51 (4.84) <.01 | -18.53(0.10) |
| a | Level \* diabetes | -6.59 (5.14) .20 | -6.41 (5.14) .21 | -6.36 (5.14) .22 | -6.45(0.12) |
| a | Slope \* age | -0.26 (0.03) <.01 | -0.25 (0.03) <.01 | -0.25 (0.03) <.01 | -0.25(0.01) |
| a | Slope \* education | -0.00 (0.10) .96 | -0.00 (0.10) .99 | 0.00 (0.10) .96 | -0.00(0.00) |
| a | Slope \* height | 0.01 (0.04) .79 | 0.01 (0.04) .75 | 0.01 (0.04) .78 | 0.01(0.00) |
| a | Slope \* smoking | -1.18 (0.55) .03 | -1.16 (0.55) .03 | -1.12 (0.55) .04 | -1.15(0.03) |
| a | Slope \* cardio | -1.09 (0.63) .08 | -1.08 (0.63) .08 | -1.06 (0.63) .09 | -1.08(0.01) |
| a | Slope \* diabetes | -1.80 (0.66) .01 | -1.76 (0.66) .01 | -1.74 (0.66) .01 | -1.77(0.03) |
| b | Level | 3.22 (0.08) <.01 | 3.08 (0.08) <.01 | 4.23 (0.06) <.01 | — |
| b | Slope | -0.14 (0.01) <.01 | -0.10 (0.01) <.01 | -0.10 (0.01) <.01 | — |
| b | Level \* age | 0.00 (0.00) .98 | -0.06 (0.00) <.01 | -0.05 (0.00) <.01 | — |
| b | Level \* education | 0.14 (0.01) <.01 | 0.16 (0.01) <.01 | 0.15 (0.01) <.01 | — |
| b | Level \* height | 0.01 (0.00) .08 | 0.02 (0.00) <.01 | 0.01 (0.00) <.01 | — |
| b | Level \* smoking | 0.02 (0.05) .73 | -0.01 (0.06) .85 | 0.03 (0.05) .58 | — |
| b | Level \* cardio | -0.10 (0.06) .06 | -0.09 (0.06) .16 | -0.12 (0.06) .04 | — |
| b | Level \* diabetes | -0.05 (0.06) .37 | -0.16 (0.07) .02 | -0.20 (0.06) <.01 | — |
| b | Slope \* age | -0.01 (0.00) <.01 | -0.00 (0.00) <.01 | -0.00 (0.00) <.01 | — |
| b | Slope \* education | 0.00 (0.00) .26 | 0.00 (0.00) .23 | 0.00 (0.00) .11 | — |
| b | Slope \* height | 0.00 (0.00) .96 | 0.00 (0.00) .68 | 0.00 (0.00) .94 | — |
| b | Slope \* smoking | -0.03 (0.01) .01 | -0.02 (0.01) .07 | -0.02 (0.01) .03 | — |
| b | Slope \* cardio | 0.00 (0.01) .99 | 0.00 (0.01) .77 | 0.00 (0.01) .74 | — |
| b | Slope \* diabetes | -0.02 (0.01) .05 | -0.00 (0.01) .67 | 0.01 (0.01) .13 | — |
| a | Var (Level) | 10808.04 (378.16) <.01 | 10820.37 (378.34) <.01 | 10814.42 (378.36) <.01 | 10814.28(6.16) |
| a | Var (Slope) | 21.99 (8.05) .01 | 21.22 (8.01) .01 | 20.95 (8.03) .01 | 21.39(0.54) |
|  | Var (Residual) | — | — | — | — |
| b | Var (Level) | 0.67 (0.06) <.01 | 1.16 (0.08) <.01 | 0.81 (0.06) <.01 | — |
| b | Var (Slope) | 0.02 (0.00) <.01 | 0.00 (0.00) .35 | 0.00 (0.00) .59 | — |
|  | Var (Residual) | — | — | — | — |
| a | Covar (Level, Slope) | -25.33 (40.89) .54 | -28.22 (40.70) .49 | -30.22 (40.71) .46 | -27.92(2.46) |
| b | Covar (Level, Slope) | -0.01 (0.01) .18 | 0.01 (0.01) .24 | 0.01 (0.01) .37 | — |
|  | Correlation of Levels | 0.16 | 0.27 | 0.26 | 0.23(0.06) |
|  | Correlation of Slopes | 0.21 | 0.74 | 0.37 | 0.44(0.27) |
|  | Correlation of Residuals | NA | NA | NA | — |
|  | N | 3,287 | 3,288 | 3,288 | 3287.67(0.58) |
|  | occasions | 3 | 3 | 3 | 3.00(0.00) |
|  | parameters | 41 | 41 | 41 | 41.00(0.00) |
|  | LL | -57,953 | -58,121 | -56,887 | -5.765322e+04( 669) |
|  | AIC | 115,987 | 116,323 | 113,855 | 1.153884e+05(1,339) |
|  | BIC | 116,237 | 116,573 | 114,105 | 1.156384e+05(1,339) |

## serial7

Gender = *male*; Process (a) = *pef*; Process (b) = *serial7*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| process | label | a | aeh | aehplus |
| ab | Covar (Levels) | 24.34 (882.90) .98 | 10.39 (897.18) .99 | 13.68 (3.34) <.01 |
| ab | Covar (Slopes) | 0.39 (46.01) .99 | 0.39 (46.51) .99 | 0.15 (0.09) .10 |
|  | Covar (Residuals) | — | — | — |
| er | Corr (Levels) | — | — | 0.16 (0.04) <.01 |
| er | Corr (Slopes) | — | — | 0.21 (0.13) .10 |
| er | Corr (Residuals) | — | — | 0.03 (0.03) .24 |
| a | Level | 405.24 (5.02) <.01 | 320.42 (13.75) <.01 | 369.01 (5.86) <.01 |
| a | Slope | -5.67 (1.06) <.01 | -6.41 (3.13) .04 | -3.71 (0.84) <.01 |
| a | Level \* age | -4.30 (0.43) <.01 | -3.66 (0.43) <.01 | -4.28 (0.22) <.01 |
| a | Level \* education | — | 7.95 (1.46) <.01 | 7.95 (0.67) <.01 |
| a | Level \* height | — | 231.94 (63.09) <.01 | 3.30 (0.30) <.01 |
| a | Level \* smoking | — | — | -27.01 (4.49) <.01 |
| a | Level \* cardio | — | — | -18.64 (4.84) <.01 |
| a | Level \* diabetes | — | — | -6.59 (5.14) .20 |
| a | Slope \* age | -0.37 (0.09) <.01 | -0.36 (0.09) <.01 | -0.26 (0.03) <.01 |
| a | Slope \* education | — | 0.19 (0.39) .62 | -0.00 (0.10) .96 |
| a | Slope \* height | — | -2.40 (12.77) .85 | 0.01 (0.04) .79 |
| a | Slope \* smoking | — | — | -1.18 (0.55) .03 |
| a | Slope \* cardio | — | — | -1.09 (0.63) .08 |
| a | Slope \* diabetes | — | — | -1.80 (0.66) .01 |
| b | Level | 4.08 (0.06) <.01 | 3.10 (0.21) <.01 | 3.22 (0.08) <.01 |
| b | Slope | -0.19 (0.01) <.01 | -0.23 (0.03) <.01 | -0.14 (0.01) <.01 |
| b | Level \* age | -0.00 (0.01) .56 | 0.00 (0.01) .53 | 0.00 (0.00) .98 |
| b | Level \* education | — | 0.15 (0.02) <.01 | 0.14 (0.01) <.01 |
| b | Level \* height | — | 0.72 (0.84) .39 | 0.01 (0.00) .08 |
| b | Level \* smoking | — | — | 0.02 (0.05) .73 |
| b | Level \* cardio | — | — | -0.10 (0.06) .06 |
| b | Level \* diabetes | — | — | -0.05 (0.06) .37 |
| b | Slope \* age | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 | -0.01 (0.00) <.01 |
| b | Slope \* education | — | -0.00 (0.00) .61 | 0.00 (0.00) .26 |
| b | Slope \* height | — | 0.32 (0.16) .05 | 0.00 (0.00) .96 |
| b | Slope \* smoking | — | — | -0.03 (0.01) .01 |
| b | Slope \* cardio | — | — | 0.00 (0.01) .99 |
| b | Slope \* diabetes | — | — | -0.02 (0.01) .05 |
| a | Var (Level) | 13344.73 (887.34) <.01 | 12303.09 (801.01) <.01 | 10808.04 (378.16) <.01 |
| a | Var (Slope) | 456.67 (64.22) <.01 | 455.94 (64.12) <.01 | 21.99 (8.05) .01 |
|  | Var (Residual) | — | — | — |
| b | Var (Level) | 0.24 (6.18) .97 | 0.19 (5.35) .97 | 0.67 (0.06) <.01 |
| b | Var (Slope) | 0.01 (0.41) .98 | 0.01 (0.41) .98 | 0.02 (0.00) <.01 |
|  | Var (Residual) | — | — | — |
| a | Covar (Level, Slope) | -648.61 (135.22) <.01 | -662.28 (132.67) <.01 | -25.33 (40.89) .54 |
| b | Covar (Level, Slope) | -0.02 (0.85) .98 | -0.02 (0.86) .98 | -0.01 (0.01) .18 |
|  | Correlation of Levels | 0.43 | 0.21 | 0.16 |
|  | Correlation of Slopes | 0.19 | 0.19 | 0.21 |
|  | Correlation of Residuals | NA | NA | NA |
|  | N | 535 | 535 | 3,287 |
|  | occasions | 5 | 5 | 3 |
|  | parameters | 20 | 28 | 41 |
|  | LL | -19,858 | -19,833 | -57,953 |
|  | AIC | 39,755 | 39,721 | 115,987 |
|  | BIC | 39,841 | 39,841 | 116,237 |

## word\_de

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| process | label | a | aeh | aehplus |
| ab | Covar (Levels) | 28.49 (563.06) .96 | 11.90 (688.37) .99 | 30.33 (3.72) <.01 |
| ab | Covar (Slopes) | 0.17 (4.69) .97 | 0.10 (15.65) .99 | 0.15 (0.08) .07 |
|  | Covar (Residuals) | — | — | — |
| er | Corr (Levels) | — | — | 0.27 (0.03) <.01 |
| er | Corr (Slopes) | — | — | 0.70 (0.54) .19 |
| er | Corr (Residuals) | — | — | 0.03 (0.02) .28 |
| a | Level | 405.19 (5.01) <.01 | 320.44 (13.77) <.01 | 368.41 (5.86) <.01 |
| a | Slope | -5.61 (1.00) <.01 | -6.43 (3.05) .04 | -3.41 (0.83) <.01 |
| a | Level \* age | -4.30 (0.43) <.01 | -3.66 (0.43) <.01 | -4.29 (0.22) <.01 |
| a | Level \* education | — | 7.95 (1.45) <.01 | 7.97 (0.67) <.01 |
| a | Level \* height | — | 231.32 (63.16) <.01 | 3.29 (0.30) <.01 |
| a | Level \* smoking | — | — | -26.96 (4.49) <.01 |
| a | Level \* cardio | — | — | -18.43 (4.84) <.01 |
| a | Level \* diabetes | — | — | -6.41 (5.14) .21 |
| a | Slope \* age | -0.37 (0.09) <.01 | -0.36 (0.09) <.01 | -0.25 (0.03) <.01 |
| a | Slope \* education | — | 0.19 (0.38) .63 | -0.00 (0.10) .99 |
| a | Slope \* height | — | -1.62 (12.54) .90 | 0.01 (0.04) .75 |
| a | Slope \* smoking | — | — | -1.16 (0.55) .03 |
| a | Slope \* cardio | — | — | -1.08 (0.63) .08 |
| a | Slope \* diabetes | — | — | -1.76 (0.66) .01 |
| b | Level | 4.01 (0.08) <.01 | 2.79 (0.18) <.01 | 3.08 (0.08) <.01 |
| b | Slope | -0.08 (0.05) .08 | -0.06 (0.04) .20 | -0.10 (0.01) <.01 |
| b | Level \* age | -0.06 (0.01) <.01 | -0.05 (0.01) <.01 | -0.06 (0.00) <.01 |
| b | Level \* education | — | 0.16 (0.03) <.01 | 0.16 (0.01) <.01 |
| b | Level \* height | — | 1.60 (0.78) .04 | 0.02 (0.00) <.01 |
| b | Level \* smoking | — | — | -0.01 (0.06) .85 |
| b | Level \* cardio | — | — | -0.09 (0.06) .16 |
| b | Level \* diabetes | — | — | -0.16 (0.07) .02 |
| b | Slope \* age | -0.00 (0.00) .20 | -0.00 (0.01) .63 | -0.00 (0.00) <.01 |
| b | Slope \* education | — | -0.00 (0.02) .96 | 0.00 (0.00) .23 |
| b | Slope \* height | — | -0.13 (0.15) .38 | 0.00 (0.00) .68 |
| b | Slope \* smoking | — | — | -0.02 (0.01) .07 |
| b | Slope \* cardio | — | — | 0.00 (0.01) .77 |
| b | Slope \* diabetes | — | — | -0.00 (0.01) .67 |
| a | Var (Level) | 13288.96 (885.52) <.01 | 12248.07 (800.66) <.01 | 10820.37 (378.34) <.01 |
| a | Var (Slope) | 427.69 (61.20) <.01 | 426.89 (61.26) <.01 | 21.22 (8.01) .01 |
|  | Var (Residual) | — | — | — |
| b | Var (Level) | 0.30 (6.88) .96 | 0.24 (6.44) .97 | 1.16 (0.08) <.01 |
| b | Var (Slope) | 0.01 (0.44) .98 | 0.01 (0.45) .98 | 0.00 (0.00) .35 |
|  | Var (Residual) | — | — | — |
| a | Covar (Level, Slope) | -620.48 (132.19) <.01 | -634.57 (129.75) <.01 | -28.22 (40.70) .49 |
| b | Covar (Level, Slope) | -0.03 (0.97) .97 | -0.04 (0.96) .97 | 0.01 (0.01) .24 |
|  | Correlation of Levels | 0.448 | 0.219 | 0.27 |
|  | Correlation of Slopes | 0.077 | 0.045 | 0.74 |
|  | Correlation of Residuals | NA | NA | NA |
|  | N | 535 | 535 | 3,288 |
|  | occasions | 5 | 5 | 3 |
|  | parameters | 20 | 28 | 41 |
|  | LL | -18,309 | -18,284 | -58,121 |
|  | AIC | 36,658 | 36,624 | 116,323 |
|  | BIC | 36,744 | 36,744 | 116,573 |

## word\_im

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| process | label | a | aeh | aehplus |
| ab | Covar (Levels) | 33.01 (653.48) .96 | 18.97 (839.59) .98 | 23.98 (3.09) <.01 |
| ab | Covar (Slopes) | 0.18 (4.09) .96 | 0.10 (19.00) .99 | 0.05 (0.07) .47 |
|  | Covar (Residuals) | — | — | — |
| er | Corr (Levels) | — | — | 0.26 (0.03) <.01 |
| er | Corr (Slopes) | — | — | 0.37 (0.59) .53 |
| er | Corr (Residuals) | — | — | 0.04 (0.02) .12 |
| a | Level | 405.19 (5.02) <.01 | 320.44 (13.74) <.01 | 368.44 (5.86) <.01 |
| a | Slope | -5.61 (1.00) <.01 | -6.43 (3.05) .04 | -3.43 (0.83) <.01 |
| a | Level \* age | -4.30 (0.43) <.01 | -3.66 (0.43) <.01 | -4.29 (0.22) <.01 |
| a | Level \* education | — | 7.95 (1.45) <.01 | 7.97 (0.67) <.01 |
| a | Level \* height | — | 231.34 (63.07) <.01 | 3.29 (0.30) <.01 |
| a | Level \* smoking | — | — | -26.99 (4.49) <.01 |
| a | Level \* cardio | — | — | -18.51 (4.84) <.01 |
| a | Level \* diabetes | — | — | -6.36 (5.14) .22 |
| a | Slope \* age | -0.37 (0.09) <.01 | -0.36 (0.09) <.01 | -0.25 (0.03) <.01 |
| a | Slope \* education | — | 0.19 (0.38) .63 | 0.00 (0.10) .96 |
| a | Slope \* height | — | -1.64 (12.54) .90 | 0.01 (0.04) .78 |
| a | Slope \* smoking | — | — | -1.12 (0.55) .04 |
| a | Slope \* cardio | — | — | -1.06 (0.63) .09 |
| a | Slope \* diabetes | — | — | -1.74 (0.66) .01 |
| b | Level | 5.17 (0.08) <.01 | 4.13 (0.17) <.01 | 4.23 (0.06) <.01 |
| b | Slope | -0.10 (0.05) .04 | -0.11 (0.05) .03 | -0.10 (0.01) <.01 |
| b | Level \* age | -0.05 (0.01) <.01 | -0.04 (0.01) <.01 | -0.05 (0.00) <.01 |
| b | Level \* education | — | 0.14 (0.03) <.01 | 0.15 (0.01) <.01 |
| b | Level \* height | — | 1.50 (0.74) .04 | 0.01 (0.00) <.01 |
| b | Level \* smoking | — | — | 0.03 (0.05) .58 |
| b | Level \* cardio | — | — | -0.12 (0.06) .04 |
| b | Level \* diabetes | — | — | -0.20 (0.06) <.01 |
| b | Slope \* age | -0.00 (0.00) .15 | -0.00 (0.01) .68 | -0.00 (0.00) <.01 |
| b | Slope \* education | — | 0.00 (0.02) .86 | 0.00 (0.00) .11 |
| b | Slope \* height | — | -0.07 (0.14) .60 | 0.00 (0.00) .94 |
| b | Slope \* smoking | — | — | -0.02 (0.01) .03 |
| b | Slope \* cardio | — | — | 0.00 (0.01) .74 |
| b | Slope \* diabetes | — | — | 0.01 (0.01) .13 |
| a | Var (Level) | 13290.51 (884.76) <.01 | 12249.56 (799.47) <.01 | 10814.42 (378.36) <.01 |
| a | Var (Slope) | 428.49 (61.27) <.01 | 427.66 (61.32) <.01 | 20.95 (8.03) .01 |
|  | Var (Residual) | — | — | — |
| b | Var (Level) | 0.32 (7.32) .97 | 0.25 (6.88) .97 | 0.81 (0.06) <.01 |
| b | Var (Slope) | 0.01 (0.44) .98 | 0.01 (0.44) .98 | 0.00 (0.00) .59 |
|  | Var (Residual) | — | — | — |
| a | Covar (Level, Slope) | -621.27 (132.28) <.01 | -635.32 (129.86) <.01 | -30.22 (40.71) .46 |
| b | Covar (Level, Slope) | -0.03 (0.99) .97 | -0.03 (1.00) .97 | 0.01 (0.01) .37 |
|  | Correlation of Levels | 0.509 | 0.341 | 0.26 |
|  | Correlation of Slopes | 0.082 | 0.046 | 0.37 |
|  | Correlation of Residuals | NA | NA | NA |
|  | N | 535 | 535 | 3,288 |
|  | occasions | 5 | 5 | 3 |
|  | parameters | 20 | 28 | 41 |
|  | LL | -18,327 | -18,302 | -56,887 |
|  | AIC | 36,693 | 36,660 | 113,855 |
|  | BIC | 36,779 | 36,780 | 114,105 |

## Summary

Study = *HRS*; Gender = *male*; Process (a) = *pef*

Computed correlations:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| label | process\_b | a | aeh | aehplus |
| Correlation of Levels | serial7 | 0.43 | 0.21 | 0.16 |
| Correlation of Levels | word\_de | 0.45 | 0.22 | 0.27 |
| Correlation of Levels | word\_im | 0.51 | 0.34 | 0.26 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| label | process\_b | a | aeh | aehplus |
| Correlation of Slopes | serial7 | 0.19 | 0.19 | 0.21 |
| Correlation of Slopes | word\_de | 0.08 | 0.04 | 0.74 |
| Correlation of Slopes | word\_im | 0.08 | 0.05 | 0.37 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| label | process\_b | a | aeh | aehplus |
| Correlation of Residuals | serial7 | -0.00 | -0.00 | 0.03 |
| Correlation of Residuals | word\_de | 0.00 | 0.00 | 0.03 |
| Correlation of Residuals | word\_im | 0.00 | 0.00 | 0.04 |

P-values for corresponding covariances:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| label | process\_b | a | aeh | aehplus |
| Covariance of Levels | serial7 | 0.98 | 0.99 | 0.00 |
| Covariance of Levels | word\_de | 0.96 | 0.99 | 0.00 |
| Covariance of Levels | word\_im | 0.96 | 0.98 | 0.00 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| label | process\_b | a | aeh | aehplus |
| Covariance of Slopes | serial7 | 0.99 | 0.99 | 0.10 |
| Covariance of Slopes | word\_de | 0.97 | 0.99 | 0.07 |
| Covariance of Slopes | word\_im | 0.96 | 1.00 | 0.47 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| label | process\_b | a | aeh | aehplus |
| Covariance of Residuals | serial7 | 0.42 | 0.31 | 0.25 |
| Covariance of Residuals | word\_de | 0.47 | 0.57 | 0.28 |
| Covariance of Residuals | word\_im | 0.01 | 0.02 | 0.12 |

#Session Info

R version 3.5.1 (2018-07-02)  
Platform: x86\_64-w64-mingw32/x64 (64-bit)  
Running under: Windows >= 8 x64 (build 9200)  
  
Matrix products: default  
  
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] bindrcpp\_0.2.2 ggplot2\_3.1.0 magrittr\_1.5 knitr\_1.21   
  
loaded via a namespace (and not attached):  
 [1] Rcpp\_1.0.0 highr\_0.7 pillar\_1.3.1 compiler\_3.5.1 plyr\_1.8.4 bindr\_0.1.1   
 [7] tools\_3.5.1 digest\_0.6.18 evaluate\_0.12 tibble\_1.4.2 gtable\_0.2.0 pkgconfig\_2.0.2   
[13] rlang\_0.3.0.1 yaml\_2.2.0 xfun\_0.4 withr\_2.1.2 dplyr\_0.7.8 stringr\_1.3.1   
[19] htmlwidgets\_1.3 hms\_0.4.2 grid\_3.5.1 DT\_0.5 tidyselect\_0.2.5 glue\_1.3.0   
[25] R6\_2.3.0 rmarkdown\_1.11 tidyr\_0.8.2 purrr\_0.2.5 readr\_1.3.0 scales\_1.0.0   
[31] htmltools\_0.3.6 assertthat\_0.2.0 testit\_0.9 colorspace\_1.3-2 stringi\_1.2.4 lazyeval\_0.2.1   
[37] munsell\_0.5.0 crayon\_1.3.4