SATSA : Seed Report

Date: 2016-10-21

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

# grip : Available models

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

|  |  |  |
| --- | --- | --- |
| process\_a | process\_b | n\_models |
| grip | fev | 2 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| study\_name | subgroup | model\_type | process\_a | process\_b | n\_models |
| satsa | female | aehplus | grip | fev | 1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| study\_name | subgroup | model\_type | process\_a | process\_b | n\_models |
| satsa | male | aehplus | grip | fev | 1 |

# female

Gender = *female*; Model type: *aehplus*; Process (a) = *grip*; Process (b): *fev*

|  |  |  |  |
| --- | --- | --- | --- |
| process | label | fev | mean(sd) |
| a | Level | 21.51 (0.45) <.01 | 21.51(NA) |
| a | Slope | -0.57 (0.04) <.01 | -0.57(NA) |
| a | Level \* age | -0.19 (0.04) <.01 | -0.19(NA) |
| a | Level \* education | 0.30 (0.39) .44 | 0.30(NA) |
| a | Level \* height | 0.15 (0.05) <.01 | 0.15(NA) |
| a | Level \* smoking | 0.26 (0.63) .69 | 0.26(NA) |
| a | Level \* cardio | -2.23 (0.83) .01 | -2.23(NA) |
| a | Level \* diabetes | -1.12 (1.99) .57 | -1.12(NA) |
| a | Slope \* age | -0.01 (0.00) <.01 | -0.01(NA) |
| a | Slope \* education | 0.02 (0.03) .49 | 0.02(NA) |
| a | Slope \* height | 0.00 (0.00) .93 | 0.00(NA) |
| a | Slope \* smoking | 0.02 (0.06) .69 | 0.02(NA) |
| a | Slope \* cardio | 0.01 (0.07) .88 | 0.01(NA) |
| a | Slope \* diabetes | -0.47 (0.32) .15 | -0.47(NA) |
| b | Level | 1.80 (0.04) <.01 | --- |
| b | Slope | -0.03 (0.00) <.01 | --- |
| b | Level \* age | -0.03 (0.00) <.01 | --- |
| b | Level \* education | 0.04 (0.03) .19 | --- |
| b | Level \* height | 0.02 (0.00) <.01 | --- |
| b | Level \* smoking | -0.06 (0.04) .19 | --- |
| b | Level \* cardio | -0.12 (0.06) .06 | --- |
| b | Level \* diabetes | -0.10 (0.11) .36 | --- |
| b | Slope \* age | 0.00 (0.00) .17 | --- |
| b | Slope \* education | 0.00 (0.00) .95 | --- |
| b | Slope \* height | 0.00 (0.00) .53 | --- |
| b | Slope \* smoking | -0.00 (0.00) .51 | --- |
| b | Slope \* cardio | -0.00 (0.01) .95 | --- |
| b | Slope \* diabetes | -0.00 (0.01) .72 | --- |
| a | Var (Level) | 13.67 (2.39) <.01 | 13.67(NA) |
| a | Var (Slope) | 0.02 (0.01) .10 | 0.02(NA) |
| a | Var (Residual) | 21.60 (1.06) <.01 | 21.60(NA) |
| a | Covar (Level, Slope) | 0.10 (0.14) .48 | 0.10(NA) |
| b | Var (Level) | 0.09 (0.01) <.01 | --- |
| b | Var (Slope) | 0.00 (0.00) <.01 | --- |
| b | Var (Residual) | 0.06 (0.00) <.01 | --- |
| b | Covar (Level, Slope) | -0.00 (0.00) .21 | --- |
| ab | Covar (Levels) | 0.06 (0.12) .59 | --- |
| ab | Covar (Slopes) | 0.00 (0.00) .94 | --- |
| ab | Covar (Residuals) | 0.17 (0.04) <.01 | --- |
|  | Correlation of Levels | 0.058 | 0.06(NA) |
|  | Correlation of Slopes | NaN | --- |
|  | Correlation of Residuals | 0.153 | 0.15(NA) |
|  | N | 408 | 408.00(NA) |
|  | occasions | 7 | 7.00(NA) |
|  | parameters | 41 | 41.00(NA) |
|  | LL | -5,084 | -5,084(NA) |
|  | AIC | 10,251 | 10,251(NA) |
|  | BIC | 10,415 | 10,415(NA) |

## fev

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

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| a | Level | 21.51 (0.45) <.01 |
| a | Slope | -0.57 (0.04) <.01 |
| a | Level \* age | -0.19 (0.04) <.01 |
| a | Level \* education | 0.30 (0.39) .44 |
| a | Level \* height | 0.15 (0.05) <.01 |
| a | Level \* smoking | 0.26 (0.63) .69 |
| a | Level \* cardio | -2.23 (0.83) .01 |
| a | Level \* diabetes | -1.12 (1.99) .57 |
| a | Slope \* age | -0.01 (0.00) <.01 |
| a | Slope \* education | 0.02 (0.03) .49 |
| a | Slope \* height | 0.00 (0.00) .93 |
| a | Slope \* smoking | 0.02 (0.06) .69 |
| a | Slope \* cardio | 0.01 (0.07) .88 |
| a | Slope \* diabetes | -0.47 (0.32) .15 |
| b | Level | 1.80 (0.04) <.01 |
| b | Slope | -0.03 (0.00) <.01 |
| b | Level \* age | -0.03 (0.00) <.01 |
| b | Level \* education | 0.04 (0.03) .19 |
| b | Level \* height | 0.02 (0.00) <.01 |
| b | Level \* smoking | -0.06 (0.04) .19 |
| b | Level \* cardio | -0.12 (0.06) .06 |
| b | Level \* diabetes | -0.10 (0.11) .36 |
| b | Slope \* age | 0.00 (0.00) .17 |
| b | Slope \* education | 0.00 (0.00) .95 |
| b | Slope \* height | 0.00 (0.00) .53 |
| b | Slope \* smoking | -0.00 (0.00) .51 |
| b | Slope \* cardio | -0.00 (0.01) .95 |
| b | Slope \* diabetes | -0.00 (0.01) .72 |
| a | Var (Level) | 13.67 (2.39) <.01 |
| a | Var (Slope) | 0.02 (0.01) .10 |
| a | Var (Residual) | 21.60 (1.06) <.01 |
| a | Covar (Level, Slope) | 0.10 (0.14) .48 |
| b | Var (Level) | 0.09 (0.01) <.01 |
| b | Var (Slope) | 0.00 (0.00) <.01 |
| b | Var (Residual) | 0.06 (0.00) <.01 |
| b | Covar (Level, Slope) | -0.00 (0.00) .21 |
| ab | Covar (Levels) | 0.06 (0.12) .59 |
| ab | Covar (Slopes) | 0.00 (0.00) .94 |
| ab | Covar (Residuals) | 0.17 (0.04) <.01 |
|  | Correlation of Levels | 0.058 |
|  | Correlation of Slopes | NaN |
|  | Correlation of Residuals | 0.153 |
|  | N | 408 |
|  | occasions | 7 |
|  | parameters | 41 |
|  | LL | -5,084 |
|  | AIC | 10,251 |
|  | BIC | 10,415 |

## Summary

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

Computed correlations:

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Levels | fev | 0.06 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Slopes | fev | NaN |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Residuals | fev | 0.15 |

P-values for corresponding covariances:

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Levels | fev | 0.59 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Slopes | fev | 0.94 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Residuals | fev | 0.00 |

# male

Gender = *male*; Model type: *aehplus*; Process (a) = *grip*; Process (b): *fev*

|  |  |  |  |
| --- | --- | --- | --- |
| process | label | fev | mean(sd) |
| a | Level | 36.89 (0.84) <.01 | 36.89(NA) |
| a | Slope | -0.97 (0.08) <.01 | -0.97(NA) |
| a | Level \* age | -0.47 (0.06) <.01 | -0.47(NA) |
| a | Level \* education | 0.05 (0.57) .93 | 0.05(NA) |
| a | Level \* height | 0.37 (0.09) <.01 | 0.37(NA) |
| a | Level \* smoking | 1.64 (1.05) .12 | 1.64(NA) |
| a | Level \* cardio | -0.41 (1.49) .78 | -0.41(NA) |
| a | Level \* diabetes | -2.52 (3.43) .46 | -2.52(NA) |
| a | Slope \* age | -0.02 (0.01) <.01 | -0.02(NA) |
| a | Slope \* education | 0.00 (0.04) .96 | 0.00(NA) |
| a | Slope \* height | -0.00 (0.01) .77 | -0.00(NA) |
| a | Slope \* smoking | 0.03 (0.08) .73 | 0.03(NA) |
| a | Slope \* cardio | 0.07 (0.10) .50 | 0.07(NA) |
| a | Slope \* diabetes | -0.17 (0.49) .72 | -0.17(NA) |
| b | Level | 2.54 (0.07) <.01 | --- |
| b | Slope | -0.05 (0.01) <.01 | --- |
| b | Level \* age | -0.04 (0.01) <.01 | --- |
| b | Level \* education | 0.04 (0.04) .35 | --- |
| b | Level \* height | 0.04 (0.01) <.01 | --- |
| b | Level \* smoking | -0.12 (0.08) .16 | --- |
| b | Level \* cardio | -0.28 (0.13) .03 | --- |
| b | Level \* diabetes | -0.43 (0.27) .11 | --- |
| b | Slope \* age | 0.00 (0.00) .31 | --- |
| b | Slope \* education | 0.00 (0.00) .96 | --- |
| b | Slope \* height | 0.00 (0.00) .64 | --- |
| b | Slope \* smoking | 0.00 (0.01) .86 | --- |
| b | Slope \* cardio | 0.00 (0.01) .59 | --- |
| b | Slope \* diabetes | 0.01 (0.04) .79 | --- |
| a | Var (Level) | 35.34 (5.33) <.01 | 35.34(NA) |
| a | Var (Slope) | 0.04 (0.03) .25 | 0.04(NA) |
| a | Var (Residual) | 35.13 (2.33) <.01 | 35.13(NA) |
| a | Covar (Level, Slope) | 0.34 (0.34) .32 | 0.34(NA) |
| b | Var (Level) | 0.27 (0.04) <.01 | --- |
| b | Var (Slope) | 0.00 (0.00) .02 | --- |
| b | Var (Residual) | 0.09 (0.00) <.01 | --- |
| b | Covar (Level, Slope) | 0.00 (0.00) .48 | --- |
| ab | Covar (Levels) | 0.64 (0.33) .05 | --- |
| ab | Covar (Slopes) | 0.00 (0.00) .14 | --- |
| ab | Covar (Residuals) | 0.28 (0.08) <.01 | --- |
|  | Correlation of Levels | 0.21 | 0.21(NA) |
|  | Correlation of Slopes | Inf | Inf(NA) |
|  | Correlation of Residuals | 0.16 | 0.16(NA) |
|  | N | 299 | 299.00(NA) |
|  | occasions | 7 | 7.00(NA) |
|  | parameters | 41 | 41.00(NA) |
|  | LL | -4,247 | -4,247(NA) |
|  | AIC | 8,577 | 8,577(NA) |
|  | BIC | 8,728 | 8,728(NA) |

## fev

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

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| a | Level | 36.89 (0.84) <.01 |
| a | Slope | -0.97 (0.08) <.01 |
| a | Level \* age | -0.47 (0.06) <.01 |
| a | Level \* education | 0.05 (0.57) .93 |
| a | Level \* height | 0.37 (0.09) <.01 |
| a | Level \* smoking | 1.64 (1.05) .12 |
| a | Level \* cardio | -0.41 (1.49) .78 |
| a | Level \* diabetes | -2.52 (3.43) .46 |
| a | Slope \* age | -0.02 (0.01) <.01 |
| a | Slope \* education | 0.00 (0.04) .96 |
| a | Slope \* height | -0.00 (0.01) .77 |
| a | Slope \* smoking | 0.03 (0.08) .73 |
| a | Slope \* cardio | 0.07 (0.10) .50 |
| a | Slope \* diabetes | -0.17 (0.49) .72 |
| b | Level | 2.54 (0.07) <.01 |
| b | Slope | -0.05 (0.01) <.01 |
| b | Level \* age | -0.04 (0.01) <.01 |
| b | Level \* education | 0.04 (0.04) .35 |
| b | Level \* height | 0.04 (0.01) <.01 |
| b | Level \* smoking | -0.12 (0.08) .16 |
| b | Level \* cardio | -0.28 (0.13) .03 |
| b | Level \* diabetes | -0.43 (0.27) .11 |
| b | Slope \* age | 0.00 (0.00) .31 |
| b | Slope \* education | 0.00 (0.00) .96 |
| b | Slope \* height | 0.00 (0.00) .64 |
| b | Slope \* smoking | 0.00 (0.01) .86 |
| b | Slope \* cardio | 0.00 (0.01) .59 |
| b | Slope \* diabetes | 0.01 (0.04) .79 |
| a | Var (Level) | 35.34 (5.33) <.01 |
| a | Var (Slope) | 0.04 (0.03) .25 |
| a | Var (Residual) | 35.13 (2.33) <.01 |
| a | Covar (Level, Slope) | 0.34 (0.34) .32 |
| b | Var (Level) | 0.27 (0.04) <.01 |
| b | Var (Slope) | 0.00 (0.00) .02 |
| b | Var (Residual) | 0.09 (0.00) <.01 |
| b | Covar (Level, Slope) | 0.00 (0.00) .48 |
| ab | Covar (Levels) | 0.64 (0.33) .05 |
| ab | Covar (Slopes) | 0.00 (0.00) .14 |
| ab | Covar (Residuals) | 0.28 (0.08) <.01 |
|  | Correlation of Levels | 0.21 |
|  | Correlation of Slopes | Inf |
|  | Correlation of Residuals | 0.16 |
|  | N | 299 |
|  | occasions | 7 |
|  | parameters | 41 |
|  | LL | -4,247 |
|  | AIC | 8,577 |
|  | BIC | 8,728 |

## Summary

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

Computed correlations:

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Levels | fev | 0.21 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Slopes | fev | Inf |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Residuals | fev | 0.16 |

P-values for corresponding covariances:

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Levels | fev | 0.05 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Slopes | fev | 0.14 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Residuals | fev | 0.00 |

# gait : Available models

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

|  |  |  |
| --- | --- | --- |
| process\_a | process\_b | n\_models |
| gait | fev | 2 |
| gait | grip | 2 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| study\_name | subgroup | model\_type | process\_a | process\_b | n\_models |
| satsa | female | aehplus | gait | fev | 1 |
| satsa | female | aehplus | gait | grip | 1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| study\_name | subgroup | model\_type | process\_a | process\_b | n\_models |
| satsa | male | aehplus | gait | fev | 1 |
| satsa | male | aehplus | gait | grip | 1 |

# female

Gender = *female*; Model type: *aehplus*; Process (a) = *gait*; Process (b): *fev*, *grip*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| process | label | fev | grip | mean(sd) |
| a | Level | 10.77 (0.50) <.01 | 10.77 (0.49) <.01 | 10.77(0.00) |
| a | Slope | 0.12 (0.06) .06 | 0.12 (0.06) .05 | 0.12(0.00) |
| a | Level \* age | 0.14 (0.05) <.01 | 0.14 (0.04) <.01 | 0.14(0.00) |
| a | Level \* education | -0.37 (0.48) .44 | -0.33 (0.49) .50 | -0.35(0.03) |
| a | Level \* height | -0.01 (0.05) .85 | -0.01 (0.05) .78 | -0.01(0.00) |
| a | Level \* smoking | -0.04 (0.69) .95 | 0.03 (0.69) .97 | -0.01(0.05) |
| a | Level \* cardio | 0.22 (0.95) .81 | 0.19 (0.92) .83 | 0.21(0.02) |
| a | Level \* diabetes | 2.08 (1.61) .20 | 2.08 (1.79) .24 | 2.08(0.00) |
| a | Slope \* age | 0.01 (0.01) .36 | 0.01 (0.01) .33 | 0.01(0.00) |
| a | Slope \* education | -0.00 (0.06) .97 | -0.00 (0.06) .96 | -0.00(0.00) |
| a | Slope \* height | 0.00 (0.01) .94 | 0.00 (0.01) .91 | 0.00(0.00) |
| a | Slope \* smoking | 0.07 (0.08) .38 | 0.07 (0.08) .42 | 0.07(0.00) |
| a | Slope \* cardio | -0.00 (0.13) .99 | -0.00 (0.12) .99 | -0.00(0.00) |
| a | Slope \* diabetes | 0.18 (0.29) .53 | 0.19 (0.28) .51 | 0.18(0.00) |
| b | Level | 1.85 (0.04) <.01 | 21.73 (0.69) <.01 | --- |
| b | Slope | -0.03 (0.00) <.01 | -0.59 (0.06) <.01 | --- |
| b | Level \* age | -0.03 (0.00) <.01 | -0.17 (0.05) <.01 | --- |
| b | Level \* education | 0.04 (0.04) .23 | 0.77 (0.55) .16 | --- |
| b | Level \* height | 0.02 (0.00) <.01 | 0.17 (0.08) .02 | --- |
| b | Level \* smoking | -0.11 (0.05) .03 | 0.65 (0.88) .46 | --- |
| b | Level \* cardio | -0.18 (0.07) .01 | -2.17 (1.04) .04 | --- |
| b | Level \* diabetes | -0.12 (0.26) .66 | -1.84 (2.89) .52 | --- |
| b | Slope \* age | 0.00 (0.00) .16 | -0.01 (0.00) <.01 | --- |
| b | Slope \* education | 0.00 (0.00) .94 | 0.00 (0.05) .97 | --- |
| b | Slope \* height | 0.00 (0.00) .79 | -0.00 (0.01) .66 | --- |
| b | Slope \* smoking | 0.00 (0.00) .64 | 0.00 (0.08) .97 | --- |
| b | Slope \* cardio | 0.00 (0.01) .80 | -0.04 (0.11) .69 | --- |
| b | Slope \* diabetes | -0.00 (0.02) .93 | -0.39 (0.50) .44 | --- |
| a | Var (Level) | 4.88 (1.11) <.01 | 4.99 (1.17) <.01 | 4.94(0.08) |
| a | Var (Slope) | 0.09 (0.01) <.01 | 0.09 (0.01) <.01 | 0.09(0.00) |
| a | Var (Residual) | 8.54 (0.21) <.01 | 8.55 (0.28) <.01 | 8.55(0.00) |
| a | Covar (Level, Slope) | -0.50 (0.13) <.01 | -0.52 (0.13) <.01 | -0.51(0.01) |
| b | Var (Level) | 0.08 (0.01) <.01 | 8.26 (4.08) .04 | --- |
| b | Var (Slope) | 0.00 (0.00) .01 | 0.02 (0.02) .45 | --- |
| b | Var (Residual) | 0.06 (0.00) <.01 | 22.48 (1.29) <.01 | --- |
| b | Covar (Level, Slope) | 0.00 (0.00) .73 | 0.29 (0.26) .27 | --- |
| ab | Covar (Levels) | -0.24 (0.16) .12 | -1.06 (2.67) .69 | --- |
| ab | Covar (Slopes) | -0.00 (0.00) .34 | -0.00 (0.02) .96 | --- |
| ab | Covar (Residuals) | -0.03 (0.04) .46 | -0.08 (0.71) .91 | --- |
|  | Correlation of Levels | -0.376 | -0.1648 | -0.27(0.15) |
|  | Correlation of Slopes | -Inf | -0.0265 | -Inf(NaN) |
|  | Correlation of Residuals | -0.043 | -0.0056 | -0.02(0.03) |
|  | N | 366 | 366 | 366.00(0.00) |
|  | occasions | 7 | 7 | 7.00(0.00) |
|  | parameters | 41 | 41 | 41.00(0.00) |
|  | LL | -3,533 | -6,914 | -5,224(2,391) |
|  | AIC | 7,148 | 13,910 | 10,529(4,781) |
|  | BIC | 7,308 | 14,070 | 10,689(4,781) |

## fev

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

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| a | Level | 10.77 (0.50) <.01 |
| a | Slope | 0.12 (0.06) .06 |
| a | Level \* age | 0.14 (0.05) <.01 |
| a | Level \* education | -0.37 (0.48) .44 |
| a | Level \* height | -0.01 (0.05) .85 |
| a | Level \* smoking | -0.04 (0.69) .95 |
| a | Level \* cardio | 0.22 (0.95) .81 |
| a | Level \* diabetes | 2.08 (1.61) .20 |
| a | Slope \* age | 0.01 (0.01) .36 |
| a | Slope \* education | -0.00 (0.06) .97 |
| a | Slope \* height | 0.00 (0.01) .94 |
| a | Slope \* smoking | 0.07 (0.08) .38 |
| a | Slope \* cardio | -0.00 (0.13) .99 |
| a | Slope \* diabetes | 0.18 (0.29) .53 |
| b | Level | 1.85 (0.04) <.01 |
| b | Slope | -0.03 (0.00) <.01 |
| b | Level \* age | -0.03 (0.00) <.01 |
| b | Level \* education | 0.04 (0.04) .23 |
| b | Level \* height | 0.02 (0.00) <.01 |
| b | Level \* smoking | -0.11 (0.05) .03 |
| b | Level \* cardio | -0.18 (0.07) .01 |
| b | Level \* diabetes | -0.12 (0.26) .66 |
| b | Slope \* age | 0.00 (0.00) .16 |
| b | Slope \* education | 0.00 (0.00) .94 |
| b | Slope \* height | 0.00 (0.00) .79 |
| b | Slope \* smoking | 0.00 (0.00) .64 |
| b | Slope \* cardio | 0.00 (0.01) .80 |
| b | Slope \* diabetes | -0.00 (0.02) .93 |
| a | Var (Level) | 4.88 (1.11) <.01 |
| a | Var (Slope) | 0.09 (0.01) <.01 |
| a | Var (Residual) | 8.54 (0.21) <.01 |
| a | Covar (Level, Slope) | -0.50 (0.13) <.01 |
| b | Var (Level) | 0.08 (0.01) <.01 |
| b | Var (Slope) | 0.00 (0.00) .01 |
| b | Var (Residual) | 0.06 (0.00) <.01 |
| b | Covar (Level, Slope) | 0.00 (0.00) .73 |
| ab | Covar (Levels) | -0.24 (0.16) .12 |
| ab | Covar (Slopes) | -0.00 (0.00) .34 |
| ab | Covar (Residuals) | -0.03 (0.04) .46 |
|  | Correlation of Levels | -0.376 |
|  | Correlation of Slopes | -Inf |
|  | Correlation of Residuals | -0.043 |
|  | N | 366 |
|  | occasions | 7 |
|  | parameters | 41 |
|  | LL | -3,533 |
|  | AIC | 7,148 |
|  | BIC | 7,308 |

## grip

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

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| a | Level | 10.77 (0.49) <.01 |
| a | Slope | 0.12 (0.06) .05 |
| a | Level \* age | 0.14 (0.04) <.01 |
| a | Level \* education | -0.33 (0.49) .50 |
| a | Level \* height | -0.01 (0.05) .78 |
| a | Level \* smoking | 0.03 (0.69) .97 |
| a | Level \* cardio | 0.19 (0.92) .83 |
| a | Level \* diabetes | 2.08 (1.79) .24 |
| a | Slope \* age | 0.01 (0.01) .33 |
| a | Slope \* education | -0.00 (0.06) .96 |
| a | Slope \* height | 0.00 (0.01) .91 |
| a | Slope \* smoking | 0.07 (0.08) .42 |
| a | Slope \* cardio | -0.00 (0.12) .99 |
| a | Slope \* diabetes | 0.19 (0.28) .51 |
| b | Level | 21.73 (0.69) <.01 |
| b | Slope | -0.59 (0.06) <.01 |
| b | Level \* age | -0.17 (0.05) <.01 |
| b | Level \* education | 0.77 (0.55) .16 |
| b | Level \* height | 0.17 (0.08) .02 |
| b | Level \* smoking | 0.65 (0.88) .46 |
| b | Level \* cardio | -2.17 (1.04) .04 |
| b | Level \* diabetes | -1.84 (2.89) .52 |
| b | Slope \* age | -0.01 (0.00) <.01 |
| b | Slope \* education | 0.00 (0.05) .97 |
| b | Slope \* height | -0.00 (0.01) .66 |
| b | Slope \* smoking | 0.00 (0.08) .97 |
| b | Slope \* cardio | -0.04 (0.11) .69 |
| b | Slope \* diabetes | -0.39 (0.50) .44 |
| a | Var (Level) | 4.99 (1.17) <.01 |
| a | Var (Slope) | 0.09 (0.01) <.01 |
| a | Var (Residual) | 8.55 (0.28) <.01 |
| a | Covar (Level, Slope) | -0.52 (0.13) <.01 |
| b | Var (Level) | 8.26 (4.08) .04 |
| b | Var (Slope) | 0.02 (0.02) .45 |
| b | Var (Residual) | 22.48 (1.29) <.01 |
| b | Covar (Level, Slope) | 0.29 (0.26) .27 |
| ab | Covar (Levels) | -1.06 (2.67) .69 |
| ab | Covar (Slopes) | -0.00 (0.02) .96 |
| ab | Covar (Residuals) | -0.08 (0.71) .91 |
|  | Correlation of Levels | -0.1648 |
|  | Correlation of Slopes | -0.0265 |
|  | Correlation of Residuals | -0.0056 |
|  | N | 366 |
|  | occasions | 7 |
|  | parameters | 41 |
|  | LL | -6,914 |
|  | AIC | 13,910 |
|  | BIC | 14,070 |

## Summary

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

Computed correlations:

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Levels | fev | -0.38 |
| Correlation of Levels | grip | -0.16 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Slopes | fev | -Inf |
| Correlation of Slopes | grip | -0.03 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Residuals | fev | -0.04 |
| Correlation of Residuals | grip | -0.01 |

P-values for corresponding covariances:

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Levels | fev | 0.12 |
| Covariance of Levels | grip | 0.69 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Slopes | fev | 0.34 |
| Covariance of Slopes | grip | 0.96 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Residuals | fev | 0.46 |
| Covariance of Residuals | grip | 0.91 |

# male

Gender = *male*; Model type: *aehplus*; Process (a) = *gait*; Process (b): *fev*, *grip*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| process | label | fev | grip | mean(sd) |
| a | Level | 9.57 (0.44) <.01 | 9.61 (0.43) <.01 | 9.59(0.03) |
| a | Slope | 0.16 (0.06) .01 | 0.15 (0.06) .01 | 0.16(0.01) |
| a | Level \* age | 0.10 (0.04) .01 | 0.10 (0.04) .01 | 0.10(0.00) |
| a | Level \* education | -0.31 (0.29) .29 | -0.35 (0.31) .26 | -0.33(0.03) |
| a | Level \* height | 0.00 (0.04) .93 | 0.00 (0.04) .96 | 0.00(0.00) |
| a | Level \* smoking | -0.49 (0.47) .29 | -0.53 (0.48) .27 | -0.51(0.03) |
| a | Level \* cardio | 0.69 (0.64) .28 | 0.59 (0.64) .36 | 0.64(0.07) |
| a | Level \* diabetes | -0.14 (2.58) .96 | -0.19 (7.13) .98 | -0.17(0.04) |
| a | Slope \* age | 0.00 (0.00) .34 | 0.00 (0.00) .34 | 0.00(0.00) |
| a | Slope \* education | -0.00 (0.04) .91 | 0.00 (0.04) .97 | -0.00(0.00) |
| a | Slope \* height | -0.00 (0.01) .58 | -0.00 (0.00) .57 | -0.00(0.00) |
| a | Slope \* smoking | 0.01 (0.06) .92 | 0.01 (0.06) .85 | 0.01(0.00) |
| a | Slope \* cardio | -0.06 (0.09) .49 | -0.05 (0.10) .63 | -0.06(0.01) |
| a | Slope \* diabetes | -0.01 (0.39) .98 | -0.00 (1.27) .99 | -0.01(0.01) |
| b | Level | 2.68 (0.10) <.01 | 37.99 (1.20) <.01 | --- |
| b | Slope | -0.06 (0.01) <.01 | -1.01 (0.12) <.01 | --- |
| b | Level \* age | -0.03 (0.01) <.01 | -0.31 (0.07) <.01 | --- |
| b | Level \* education | 0.03 (0.05) .61 | 0.70 (0.66) .29 | --- |
| b | Level \* height | 0.04 (0.01) <.01 | 0.41 (0.10) <.01 | --- |
| b | Level \* smoking | -0.12 (0.10) .23 | 2.56 (1.22) .04 | --- |
| b | Level \* cardio | -0.25 (0.15) .10 | -0.27 (1.65) .87 | --- |
| b | Level \* diabetes | -0.70 (0.56) .21 | -0.34 (8.69) .97 | --- |
| b | Slope \* age | -0.00 (0.00) .08 | -0.03 (0.01) <.01 | --- |
| b | Slope \* education | 0.00 (0.00) .63 | -0.02 (0.06) .72 | --- |
| b | Slope \* height | 0.00 (0.00) .43 | -0.00 (0.01) .52 | --- |
| b | Slope \* smoking | 0.00 (0.01) .70 | -0.04 (0.11) .68 | --- |
| b | Slope \* cardio | 0.00 (0.01) .81 | -0.00 (0.14) .98 | --- |
| b | Slope \* diabetes | 0.03 (0.09) .75 | -0.68 (3.57) .85 | --- |
| a | Var (Level) | 1.38 (1.31) .29 | 1.42 (1.37) .30 | 1.40(0.03) |
| a | Var (Slope) | 0.03 (0.02) .07 | 0.03 (0.02) .08 | 0.03(0.00) |
| a | Var (Residual) | 5.04 (0.52) <.01 | 4.98 (0.55) <.01 | 5.01(0.04) |
| a | Covar (Level, Slope) | -0.14 (0.14) .32 | -0.12 (0.14) .37 | -0.13(0.01) |
| b | Var (Level) | 0.25 (0.04) <.01 | 21.49 (7.25) <.01 | --- |
| b | Var (Slope) | 0.00 (0.00) .31 | 0.06 (0.05) .25 | --- |
| b | Var (Residual) | 0.10 (0.00) <.01 | 34.42 (2.65) <.01 | --- |
| b | Covar (Level, Slope) | 0.00 (0.00) .24 | 0.71 (0.54) .19 | --- |
| ab | Covar (Levels) | -0.06 (0.20) .76 | -2.81 (2.50) .26 | --- |
| ab | Covar (Slopes) | -0.00 (0.00) .40 | -0.02 (0.02) .39 | --- |
| ab | Covar (Residuals) | 0.04 (0.05) .48 | -0.32 (0.97) .74 | --- |
|  | Correlation of Levels | -0.104 | -0.509 | -0.31(0.29) |
|  | Correlation of Slopes | -Inf | -0.415 | -Inf(NaN) |
|  | Correlation of Residuals | 0.051 | -0.024 | 0.01(0.05) |
|  | N | 265 | 265 | 265.00(0.00) |
|  | occasions | 7 | 7 | 7.00(0.00) |
|  | parameters | 41 | 41 | 41.00(0.00) |
|  | LL | -2,583 | -4,966 | -3,775(1,685) |
|  | AIC | 5,248 | 10,015 | 7,631(3,371) |
|  | BIC | 5,394 | 10,162 | 7,778(3,371) |

## fev

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

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| a | Level | 9.57 (0.44) <.01 |
| a | Slope | 0.16 (0.06) .01 |
| a | Level \* age | 0.10 (0.04) .01 |
| a | Level \* education | -0.31 (0.29) .29 |
| a | Level \* height | 0.00 (0.04) .93 |
| a | Level \* smoking | -0.49 (0.47) .29 |
| a | Level \* cardio | 0.69 (0.64) .28 |
| a | Level \* diabetes | -0.14 (2.58) .96 |
| a | Slope \* age | 0.00 (0.00) .34 |
| a | Slope \* education | -0.00 (0.04) .91 |
| a | Slope \* height | -0.00 (0.01) .58 |
| a | Slope \* smoking | 0.01 (0.06) .92 |
| a | Slope \* cardio | -0.06 (0.09) .49 |
| a | Slope \* diabetes | -0.01 (0.39) .98 |
| b | Level | 2.68 (0.10) <.01 |
| b | Slope | -0.06 (0.01) <.01 |
| b | Level \* age | -0.03 (0.01) <.01 |
| b | Level \* education | 0.03 (0.05) .61 |
| b | Level \* height | 0.04 (0.01) <.01 |
| b | Level \* smoking | -0.12 (0.10) .23 |
| b | Level \* cardio | -0.25 (0.15) .10 |
| b | Level \* diabetes | -0.70 (0.56) .21 |
| b | Slope \* age | -0.00 (0.00) .08 |
| b | Slope \* education | 0.00 (0.00) .63 |
| b | Slope \* height | 0.00 (0.00) .43 |
| b | Slope \* smoking | 0.00 (0.01) .70 |
| b | Slope \* cardio | 0.00 (0.01) .81 |
| b | Slope \* diabetes | 0.03 (0.09) .75 |
| a | Var (Level) | 1.38 (1.31) .29 |
| a | Var (Slope) | 0.03 (0.02) .07 |
| a | Var (Residual) | 5.04 (0.52) <.01 |
| a | Covar (Level, Slope) | -0.14 (0.14) .32 |
| b | Var (Level) | 0.25 (0.04) <.01 |
| b | Var (Slope) | 0.00 (0.00) .31 |
| b | Var (Residual) | 0.10 (0.00) <.01 |
| b | Covar (Level, Slope) | 0.00 (0.00) .24 |
| ab | Covar (Levels) | -0.06 (0.20) .76 |
| ab | Covar (Slopes) | -0.00 (0.00) .40 |
| ab | Covar (Residuals) | 0.04 (0.05) .48 |
|  | Correlation of Levels | -0.104 |
|  | Correlation of Slopes | -Inf |
|  | Correlation of Residuals | 0.051 |
|  | N | 265 |
|  | occasions | 7 |
|  | parameters | 41 |
|  | LL | -2,583 |
|  | AIC | 5,248 |
|  | BIC | 5,394 |

## grip

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

|  |  |  |
| --- | --- | --- |
| process | label | aehplus |
| a | Level | 9.61 (0.43) <.01 |
| a | Slope | 0.15 (0.06) .01 |
| a | Level \* age | 0.10 (0.04) .01 |
| a | Level \* education | -0.35 (0.31) .26 |
| a | Level \* height | 0.00 (0.04) .96 |
| a | Level \* smoking | -0.53 (0.48) .27 |
| a | Level \* cardio | 0.59 (0.64) .36 |
| a | Level \* diabetes | -0.19 (7.13) .98 |
| a | Slope \* age | 0.00 (0.00) .34 |
| a | Slope \* education | 0.00 (0.04) .97 |
| a | Slope \* height | -0.00 (0.00) .57 |
| a | Slope \* smoking | 0.01 (0.06) .85 |
| a | Slope \* cardio | -0.05 (0.10) .63 |
| a | Slope \* diabetes | -0.00 (1.27) .99 |
| b | Level | 37.99 (1.20) <.01 |
| b | Slope | -1.01 (0.12) <.01 |
| b | Level \* age | -0.31 (0.07) <.01 |
| b | Level \* education | 0.70 (0.66) .29 |
| b | Level \* height | 0.41 (0.10) <.01 |
| b | Level \* smoking | 2.56 (1.22) .04 |
| b | Level \* cardio | -0.27 (1.65) .87 |
| b | Level \* diabetes | -0.34 (8.69) .97 |
| b | Slope \* age | -0.03 (0.01) <.01 |
| b | Slope \* education | -0.02 (0.06) .72 |
| b | Slope \* height | -0.00 (0.01) .52 |
| b | Slope \* smoking | -0.04 (0.11) .68 |
| b | Slope \* cardio | -0.00 (0.14) .98 |
| b | Slope \* diabetes | -0.68 (3.57) .85 |
| a | Var (Level) | 1.42 (1.37) .30 |
| a | Var (Slope) | 0.03 (0.02) .08 |
| a | Var (Residual) | 4.98 (0.55) <.01 |
| a | Covar (Level, Slope) | -0.12 (0.14) .37 |
| b | Var (Level) | 21.49 (7.25) <.01 |
| b | Var (Slope) | 0.06 (0.05) .25 |
| b | Var (Residual) | 34.42 (2.65) <.01 |
| b | Covar (Level, Slope) | 0.71 (0.54) .19 |
| ab | Covar (Levels) | -2.81 (2.50) .26 |
| ab | Covar (Slopes) | -0.02 (0.02) .39 |
| ab | Covar (Residuals) | -0.32 (0.97) .74 |
|  | Correlation of Levels | -0.509 |
|  | Correlation of Slopes | -0.415 |
|  | Correlation of Residuals | -0.024 |
|  | N | 265 |
|  | occasions | 7 |
|  | parameters | 41 |
|  | LL | -4,966 |
|  | AIC | 10,015 |
|  | BIC | 10,162 |

## Summary

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

Computed correlations:

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Levels | fev | -0.10 |
| Correlation of Levels | grip | -0.51 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Slopes | fev | -Inf |
| Correlation of Slopes | grip | -0.41 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Correlation of Residuals | fev | 0.05 |
| Correlation of Residuals | grip | -0.02 |

P-values for corresponding covariances:

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Levels | fev | 0.76 |
| Covariance of Levels | grip | 0.26 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Slopes | fev | 0.40 |
| Covariance of Slopes | grip | 0.39 |

|  |  |  |
| --- | --- | --- |
| label | process\_b | aehplus |
| Covariance of Residuals | fev | 0.48 |
| Covariance of Residuals | grip | 0.74 |

#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] IalsaSynthesis\_0.1.8.9000 MplusAutomation\_0.6-4 knitr\_1.14 ggplot2\_2.1.0   
[5] magrittr\_1.5   
  
loaded via a namespace (and not attached):  
 [1] Rcpp\_0.12.7 munsell\_0.4.3 testit\_0.5 xtable\_1.8-2 lattice\_0.20-34 colorspace\_1.2-7  
 [7] R6\_2.2.0 stringr\_1.1.0 highr\_0.6 plyr\_1.8.4 dplyr\_0.5.0 tools\_3.3.1   
[13] DT\_0.2 grid\_3.3.1 gtable\_0.2.0 texreg\_1.36.7 coda\_0.18-1 DBI\_0.5-1   
[19] htmltools\_0.3.5 yaml\_2.1.13 lazyeval\_0.2.0 assertthat\_0.1 digest\_0.6.10 tibble\_1.2   
[25] formatR\_1.4 readr\_1.0.0 tidyr\_0.6.0 htmlwidgets\_0.7 rsconnect\_0.5 evaluate\_0.10   
[31] gsubfn\_0.6-6 rmarkdown\_1.1 stringi\_1.1.2 pander\_0.6.0 scales\_0.4.0 boot\_1.3-18   
[37] proto\_0.3-10