EAS : Seed report

Date: 2016-10-20

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

# Available models

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

|  |  |  |
| --- | --- | --- |
| process\_a | process\_b | n\_models |
| pef | block | 7 |
| pef | digit\_tot | 9 |
| pef | symbol | 10 |
| pef | trailsb | 9 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| study\_name | subgroup | model\_type | process\_a | process\_b | n\_models |
| eas | female | a | pef | digit\_tot | 1 |
| eas | female | a | pef | symbol | 1 |
| eas | female | a | pef | trailsb | 1 |
| eas | female | ae | pef | block | 1 |
| eas | female | ae | pef | digit\_tot | 1 |
| eas | female | ae | pef | symbol | 1 |
| eas | female | ae | pef | trailsb | 1 |
| eas | female | aeh | pef | block | 1 |
| eas | female | aeh | pef | digit\_tot | 1 |
| eas | female | aeh | pef | symbol | 1 |
| eas | female | aeh | pef | trailsb | 1 |
| eas | female | aehplus | pef | block | 1 |
| eas | female | aehplus | pef | digit\_tot | 1 |
| eas | female | aehplus | pef | symbol | 1 |
| eas | female | aehplus | pef | trailsb | 1 |
| eas | female | full | pef | block | 1 |
| eas | female | full | pef | symbol | 1 |
| eas | female | full | pef | trailsb | 1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| study\_name | subgroup | model\_type | process\_a | process\_b | n\_models |
| eas | male | a | pef | digit\_tot | 1 |
| eas | male | a | pef | symbol | 1 |
| eas | male | ae | pef | block | 1 |
| eas | male | ae | pef | digit\_tot | 1 |
| eas | male | ae | pef | symbol | 1 |
| eas | male | ae | pef | trailsb | 1 |
| eas | male | aeh | pef | block | 1 |
| eas | male | aeh | pef | digit\_tot | 1 |
| eas | male | aeh | pef | symbol | 1 |
| eas | male | aeh | pef | trailsb | 1 |
| eas | male | aehplus | pef | block | 1 |
| eas | male | aehplus | pef | digit\_tot | 1 |
| eas | male | aehplus | pef | symbol | 1 |
| eas | male | aehplus | pef | trailsb | 1 |
| eas | male | full | pef | digit\_tot | 1 |
| eas | male | full | pef | symbol | 1 |
| eas | male | full | pef | trailsb | 1 |

# female

Gender = *female*; Model type: *aehplus*; Process (a) = *pef*; Process (b): *block*, *digit\_tot*, *symbol*, *trailsb*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | block | digit\_tot | symbol | trailsb | mean(sd) |
| a | Level | 345.28 (25.90) <.01 | 347.88 (25.15) <.01 | 338.88 (25.75) <.01 | 344.53 (25.99) <.01 | 344.14(3.79) |
| a | Slope | -28.93 (6.91) <.01 | -30.34 (5.91) <.01 | -25.21 (8.42) <.01 | -28.33 (7.03) <.01 | -28.20(2.17) |
| a | Level \* age | -4.31 (1.82) .02 | -4.47 (1.77) .01 | -4.13 (1.83) .02 | -4.25 (1.88) .02 | -4.29(0.14) |
| a | Level \* education | -2.15 (2.73) .43 | -2.20 (2.86) .44 | -1.63 (2.76) .56 | -2.10 (2.56) .41 | -2.02(0.26) |
| a | Level \* height | 0.46 (1.28) .72 | 0.46 (1.23) .71 | 0.26 (1.21) .83 | 0.48 (1.22) .69 | 0.42(0.11) |
| a | Level \* smoking | -0.55 (13.18) .97 | -0.64 (15.29) .97 | -0.14 (15.61) .99 | -0.34 (15.66) .98 | -0.42(0.22) |
| a | Level \* cardio | -21.32 (33.26) .52 | -22.46 (28.88) .44 | -23.26 (31.20) .46 | -21.55 (29.27) .46 | -22.15(0.89) |
| a | Level \* diabetes | -26.31 (25.74) .31 | -26.06 (25.15) .30 | -22.93 (25.83) .38 | -26.56 (24.53) .28 | -25.47(1.70) |
| a | Slope \* age | 0.18 (0.43) .68 | 0.28 (0.44) .53 | 0.10 (0.62) .88 | 0.14 (0.54) .80 | 0.17(0.08) |
| a | Slope \* education | 0.74 (0.77) .34 | 0.74 (0.72) .30 | 0.38 (0.94) .68 | 0.68 (0.74) .36 | 0.64(0.17) |
| a | Slope \* height | 0.60 (0.26) .02 | 0.59 (0.29) .04 | 0.68 (0.41) .09 | 0.57 (0.27) .04 | 0.61(0.05) |
| a | Slope \* smoking | 1.91 (2.63) .47 | 1.97 (2.98) .51 | 1.74 (4.92) .72 | 1.89 (3.69) .61 | 1.88(0.10) |
| a | Slope \* cardio | 2.32 (10.07) .82 | 3.51 (9.70) .72 | 3.28 (12.12) .79 | 2.45 (9.40) .79 | 2.89(0.59) |
| a | Slope \* diabetes | -0.53 (8.71) .95 | -0.57 (6.70) .93 | -2.34 (9.13) .80 | -0.31 (8.60) .97 | -0.94(0.94) |
| b | Level | 18.99 (2.49) <.01 | 13.64 (0.96) <.01 | 40.61 (3.40) <.01 | 163.08 (21.45) <.01 | --- |
| b | Slope | 0.78 (0.47) .10 | 0.24 (0.19) .19 | 0.60 (0.68) .38 | 2.91 (6.20) .64 | --- |
| b | Level \* age | -0.15 (0.16) .37 | -0.07 (0.07) .30 | -0.38 (0.27) .17 | 1.81 (1.45) .21 | --- |
| b | Level \* education | 0.88 (0.26) <.01 | 0.28 (0.09) <.01 | 1.79 (0.36) <.01 | -7.22 (2.22) <.01 | --- |
| b | Level \* height | -0.01 (0.11) .91 | 0.03 (0.04) .56 | 0.05 (0.19) .78 | 0.10 (0.88) .91 | --- |
| b | Level \* smoking | 1.52 (1.44) .29 | 0.41 (0.52) .43 | 2.19 (1.95) .26 | -11.54 (10.43) .27 | --- |
| b | Level \* cardio | -0.38 (2.66) .89 | -0.33 (1.10) .76 | -4.95 (8.14) .54 | 26.85 (19.19) .16 | --- |
| b | Level \* diabetes | -4.39 (2.60) .09 | -1.59 (0.82) .05 | -6.73 (2.75) .01 | 31.07 (16.68) .06 | --- |
| b | Slope \* age | -0.04 (0.03) .18 | -0.01 (0.02) .34 | -0.06 (0.04) .09 | 0.20 (0.34) .56 | --- |
| b | Slope \* education | -0.07 (0.05) .17 | -0.02 (0.02) .34 | -0.06 (0.08) .44 | -0.11 (0.62) .86 | --- |
| b | Slope \* height | -0.01 (0.02) .66 | -0.01 (0.01) .17 | 0.01 (0.04) .89 | -0.00 (0.21) .98 | --- |
| b | Slope \* smoking | -0.10 (0.28) .72 | -0.02 (0.12) .88 | 0.09 (0.45) .83 | -0.32 (2.73) .91 | --- |
| b | Slope \* cardio | -0.07 (0.77) .93 | -0.11 (0.36) .76 | 0.00 (1.34) .99 | -1.92 (6.48) .77 | --- |
| b | Slope \* diabetes | 0.18 (0.44) .69 | 0.06 (0.15) .70 | -0.26 (0.52) .63 | 2.62 (4.55) .56 | --- |
| a | Var (Level) | 4619.53 (1051.84) <.01 | 4601.03 (1104.55) <.01 | 4709.73 (1105.26) <.01 | 4630.56 (1107.26) <.01 | 4640.22(47.92) |
| a | Var (Slope) | 37.57 (29.43) .20 | 32.13 (28.48) .26 | 103.05 (66.91) .12 | 39.51 (32.43) .22 | 53.06(33.47) |
| a | Var (Residual) | 1701.95 (104.59) <.01 | 1703.62 (122.04) <.01 | 1625.48 (95.71) <.01 | 1693.29 (88.95) <.01 | 1681.09(37.34) |
| a | Covar (Level, Slope) | -303.65 (136.78) .03 | -281.39 (136.38) .04 | -390.70 (223.92) .08 | -306.53 (168.09) .07 | -320.57(48.09) |
| b | Var (Level) | 46.29 (9.11) <.01 | 5.85 (1.38) <.01 | 112.32 (20.21) <.01 | 2356.32 (716.30) <.01 | --- |
| b | Var (Slope) | 0.14 (0.24) .55 | 0.05 (0.04) .18 | 0.30 (0.55) .59 | 5.91 (19.07) .76 | --- |
| b | Var (Residual) | 19.77 (1.57) <.01 | 2.39 (0.23) <.01 | 28.80 (2.19) <.01 | 1475.27 (76.02) <.01 | --- |
| b | Covar (Level, Slope) | -0.93 (1.45) .52 | 0.03 (0.16) .84 | -1.71 (2.88) .55 | 44.85 (135.15) .74 | --- |
| ab | Covar (Levels) | 86.03 (78.62) .27 | -24.44 (27.64) .38 | 215.86 (120.89) .07 | -781.69 (661.61) .24 | --- |
| ab | Covar (Slopes) | 0.36 (2.06) .86 | -0.61 (0.96) .53 | 2.80 (4.40) .52 | -0.54 (29.25) .98 | --- |
| ab | Covar (Residuals) | -0.38 (16.61) .98 | 3.65 (7.29) .62 | -1.93 (24.59) .94 | -78.15 (239.81) .74 | --- |
|  | Correlation of Levels | 0.186 | -0.149 | 0.2968 | -0.237 | 0.02(0.26) |
|  | Correlation of Slopes | 0.155 | -0.483 | 0.5048 | -0.036 | 0.04(0.41) |
|  | Correlation of Residuals | -0.002 | 0.057 | -0.0089 | -0.049 | -0.00(0.04) |
|  | N | 150 | 150 | 150 | 150 | 150.00(0.00) |
|  | occasions | 8 | 8 | 6 | 8 | 7.50(1.00) |
|  | parameters | 41 | 41 | 41 | 41 | 41.00(0.00) |
|  | LL | -4,525 | -3,859 | -4,327 | -5,878 | -4,647( 867) |
|  | AIC | 9,132 | 7,800 | 8,735 | 11,838 | 9,376(1,733) |
|  | BIC | 9,255 | 7,924 | 8,859 | 11,961 | 9,500(1,733) |

## block

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | ae | aeh | aehplus | full |
| a | Level | 310.35 (17.37) <.01 | 333.07 (17.93) <.01 | 345.28 (25.90) <.01 | 339.07 (26.69) <.01 |
| a | Slope | -10.71 (4.20) .01 | -26.73 (4.00) <.01 | -28.93 (6.91) <.01 | -26.99 (7.29) <.01 |
| a | Level \* age | -4.09 (1.22) <.01 | -4.25 (1.29) <.01 | -4.31 (1.82) .02 | -4.40 (1.80) .01 |
| a | Level \* education | 0.89 (1.78) .62 | -1.60 (1.88) .39 | -2.15 (2.73) .43 | -2.11 (2.71) .44 |
| a | Level \* height | --- | 0.55 (0.85) .52 | 0.46 (1.28) .72 | 0.32 (1.30) .81 |
| a | Level \* smoking | --- | --- | -0.55 (13.18) .97 | -0.33 (13.19) .98 |
| a | Level \* cardio | --- | --- | -21.32 (33.26) .52 | -22.61 (36.18) .53 |
| a | Level \* diabetes | --- | --- | -26.31 (25.74) .31 | -27.79 (25.94) .28 |
| a | Slope \* age | -0.24 (0.26) .35 | 0.19 (0.26) .46 | 0.18 (0.43) .68 | 0.19 (0.42) .64 |
| a | Slope \* education | -0.40 (0.41) .33 | 0.60 (0.45) .19 | 0.74 (0.77) .34 | 0.74 (0.76) .33 |
| a | Slope \* height | --- | 0.55 (0.20) .01 | 0.60 (0.26) .02 | 0.64 (0.29) .02 |
| a | Slope \* smoking | --- | --- | 1.91 (2.63) .47 | 1.88 (3.05) .54 |
| a | Slope \* cardio | --- | --- | 2.32 (10.07) .82 | 2.31 (10.17) .82 |
| a | Slope \* diabetes | --- | --- | -0.53 (8.71) .95 | -0.18 (9.68) .98 |
| b | Level | 13.93 (0.95) <.01 | 18.43 (1.90) <.01 | 18.99 (2.49) <.01 | 19.33 (2.75) <.01 |
| b | Slope | 1.12 (0.20) <.01 | 0.73 (0.37) .05 | 0.78 (0.47) .10 | 0.73 (0.49) .14 |
| b | Level \* age | -0.16 (0.07) .02 | -0.12 (0.15) .41 | -0.15 (0.16) .37 | -0.14 (0.16) .39 |
| b | Level \* education | 1.06 (0.11) <.01 | 0.92 (0.21) <.01 | 0.88 (0.26) <.01 | 0.88 (0.26) <.01 |
| b | Level \* height | --- | -0.01 (0.09) .89 | -0.01 (0.11) .91 | -0.01 (0.11) .96 |
| b | Level \* smoking | --- | --- | 1.52 (1.44) .29 | 1.51 (1.45) .30 |
| b | Level \* cardio | --- | --- | -0.38 (2.66) .89 | -0.29 (2.93) .92 |
| b | Level \* diabetes | --- | --- | -4.39 (2.60) .09 | -4.30 (2.58) .10 |
| b | Slope \* age | -0.03 (0.01) .04 | -0.04 (0.02) .10 | -0.04 (0.03) .18 | -0.04 (0.03) .17 |
| b | Slope \* education | -0.08 (0.02) <.01 | -0.07 (0.04) .09 | -0.07 (0.05) .17 | -0.07 (0.05) .18 |
| b | Slope \* height | --- | -0.01 (0.01) .48 | -0.01 (0.02) .66 | -0.01 (0.02) .63 |
| b | Slope \* smoking | --- | --- | -0.10 (0.28) .72 | -0.10 (0.28) .73 |
| b | Slope \* cardio | --- | --- | -0.07 (0.77) .93 | -0.07 (0.87) .94 |
| b | Slope \* diabetes | --- | --- | 0.18 (0.44) .69 | 0.16 (0.47) .73 |
| a | Var (Level) | 5212.32 (755.47) <.01 | 4780.41 (801.53) <.01 | 4619.53 (1051.84) <.01 | 4629.68 (1058.37) <.01 |
| a | Var (Slope) | 119.91 (37.08) <.01 | 44.62 (31.72) .16 | 37.57 (29.43) .20 | 38.91 (32.62) .23 |
| a | Var (Residual) | 1695.37 (386.98) <.01 | 1703.01 (503.91) <.01 | 1701.95 (104.59) <.01 | 1689.57 (104.83) <.01 |
| a | Covar (Level, Slope) | -454.24 (161.68) <.01 | -312.88 (173.77) .07 | -303.65 (136.78) .03 | -307.89 (149.73) .04 |
| b | Var (Level) | 54.09 (4.90) <.01 | 51.46 (8.54) <.01 | 46.29 (9.11) <.01 | 46.15 (9.21) <.01 |
| b | Var (Slope) | 0.26 (0.11) .01 | 0.16 (0.14) .26 | 0.14 (0.24) .55 | 0.14 (0.24) .57 |
| b | Var (Residual) | 21.49 (1.14) <.01 | 19.77 (1.49) <.01 | 19.77 (1.57) <.01 | 19.77 (1.58) <.01 |
| b | Covar (Level, Slope) | -2.10 (0.56) <.01 | -1.21 (0.93) .19 | -0.93 (1.45) .52 | -0.91 (1.46) .53 |
| ab | Covar (Levels) | 98.99 (49.69) .05 | 104.78 (52.19) .04 | 86.03 (78.62) .27 | 88.17 (79.03) .26 |
| ab | Covar (Slopes) | 3.73 (1.23) <.01 | 0.21 (1.09) .85 | 0.36 (2.06) .86 | 0.44 (2.21) .84 |
| ab | Covar (Residuals) | -0.39 (9.43) .97 | -1.25 (10.27) .90 | -0.38 (16.61) .98 | 0.44 (16.60) .98 |
|  | Correlation of Levels | 0.186 | 0.2113 | 0.186 | 0.1907 |
|  | Correlation of Slopes | 0.671 | 0.0781 | 0.155 | 0.1912 |
|  | Correlation of Residuals | -0.002 | -0.0068 | -0.002 | 0.0024 |
|  | N | 563 | 150 | 150 | 150 |
|  | occasions | 9 | 8 | 8 | 8 |
|  | parameters | 25 | 29 | 41 | 45 |
|  | LL | -9,195 | -4,535 | -4,525 | -4,524 |
|  | AIC | 18,439 | 9,128 | 9,132 | 9,138 |
|  | BIC | 18,548 | 9,216 | 9,255 | 9,273 |

## digit\_tot

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus |
| a | Level | 317.52 (14.43) <.01 | 312.29 (21.04) <.01 | 335.31 (24.64) <.01 | 347.88 (25.15) <.01 |
| a | Slope | -12.73 (3.31) <.01 | -9.96 (5.25) .06 | -27.66 (5.42) <.01 | -30.34 (5.91) <.01 |
| a | Level \* age | -3.97 (1.40) <.01 | -4.01 (1.42) <.01 | -4.40 (1.76) .01 | -4.47 (1.77) .01 |
| a | Level \* education | --- | 0.90 (2.26) .69 | -1.64 (2.81) .56 | -2.20 (2.86) .44 |
| a | Level \* height | --- | --- | 0.54 (1.19) .65 | 0.46 (1.23) .71 |
| a | Level \* smoking | --- | --- | --- | -0.64 (15.29) .97 |
| a | Level \* cardio | --- | --- | --- | -22.46 (28.88) .44 |
| a | Level \* diabetes | --- | --- | --- | -26.06 (25.15) .30 |
| a | Slope \* age | -0.30 (0.36) .41 | -0.29 (0.36) .42 | 0.28 (0.42) .50 | 0.28 (0.44) .53 |
| a | Slope \* education | --- | -0.46 (0.62) .46 | 0.58 (0.70) .41 | 0.74 (0.72) .30 |
| a | Slope \* height | --- | --- | 0.56 (0.30) .06 | 0.59 (0.29) .04 |
| a | Slope \* smoking | --- | --- | --- | 1.97 (2.98) .51 |
| a | Slope \* cardio | --- | --- | --- | 3.51 (9.70) .72 |
| a | Slope \* diabetes | --- | --- | --- | -0.57 (6.70) .93 |
| b | Level | 13.52 (0.30) <.01 | 11.20 (0.41) <.01 | 13.40 (0.88) <.01 | 13.64 (0.96) <.01 |
| b | Slope | 0.25 (0.07) <.01 | 0.36 (0.11) <.01 | 0.20 (0.18) .27 | 0.24 (0.19) .19 |
| b | Level \* age | -0.04 (0.03) .21 | -0.03 (0.03) .28 | -0.07 (0.06) .29 | -0.07 (0.07) .30 |
| b | Level \* education | --- | 0.37 (0.04) <.01 | 0.29 (0.09) <.01 | 0.28 (0.09) <.01 |
| b | Level \* height | --- | --- | 0.03 (0.04) .56 | 0.03 (0.04) .56 |
| b | Level \* smoking | --- | --- | --- | 0.41 (0.52) .43 |
| b | Level \* cardio | --- | --- | --- | -0.33 (1.10) .76 |
| b | Level \* diabetes | --- | --- | --- | -1.59 (0.82) .05 |
| b | Slope \* age | -0.01 (0.01) .27 | -0.01 (0.01) .26 | -0.01 (0.01) .32 | -0.01 (0.02) .34 |
| b | Slope \* education | --- | -0.02 (0.01) .12 | -0.02 (0.02) .41 | -0.02 (0.02) .34 |
| b | Slope \* height | --- | --- | -0.01 (0.01) .19 | -0.01 (0.01) .17 |
| b | Slope \* smoking | --- | --- | --- | -0.02 (0.12) .88 |
| b | Slope \* cardio | --- | --- | --- | -0.11 (0.36) .76 |
| b | Slope \* diabetes | --- | --- | --- | 0.06 (0.15) .70 |
| a | Var (Level) | 5464.40 (916.46) <.01 | 5443.31 (927.60) <.01 | 4799.93 (1076.88) <.01 | 4601.03 (1104.55) <.01 |
| a | Var (Slope) | 160.62 (41.39) <.01 | 156.69 (41.65) <.01 | 41.29 (28.58) .15 | 32.13 (28.48) .26 |
| a | Var (Residual) | 1625.55 (61.70) <.01 | 1623.78 (63.01) <.01 | 1700.25 (104.06) <.01 | 1703.62 (122.04) <.01 |
| a | Covar (Level, Slope) | -565.27 (163.30) <.01 | -552.12 (169.75) <.01 | -302.37 (132.32) .02 | -281.39 (136.38) .04 |
| b | Var (Level) | 10.64 (0.82) <.01 | 9.06 (0.73) <.01 | 6.39 (1.23) <.01 | 5.85 (1.38) <.01 |
| b | Var (Slope) | 0.10 (0.03) <.01 | 0.10 (0.03) <.01 | 0.05 (0.04) .16 | 0.05 (0.04) .18 |
| b | Var (Residual) | 2.69 (0.13) <.01 | 2.69 (0.13) <.01 | 2.39 (0.22) <.01 | 2.39 (0.23) <.01 |
| b | Covar (Level, Slope) | -0.37 (0.16) .02 | -0.30 (0.14) .04 | 0.02 (0.15) .89 | 0.03 (0.16) .84 |
| ab | Covar (Levels) | 3.51 (31.06) .91 | -1.14 (29.85) .97 | -17.42 (25.92) .50 | -24.44 (27.64) .38 |
| ab | Covar (Slopes) | 1.22 (1.07) .25 | 1.09 (1.06) .30 | -0.75 (0.90) .40 | -0.61 (0.96) .53 |
| ab | Covar (Residuals) | 0.68 (3.87) .86 | 0.61 (3.87) .88 | 4.47 (6.59) .50 | 3.65 (7.29) .62 |
|  | Correlation of Levels | 0.015 | -0.0051 | -0.099 | -0.149 |
|  | Correlation of Slopes | 0.305 | 0.2791 | -0.513 | -0.483 |
|  | Correlation of Residuals | 0.010 | 0.0092 | 0.070 | 0.057 |
|  | N | 595 | 595 | 150 | 150 |
|  | occasions | 8 | 8 | 8 | 8 |
|  | parameters | 21 | 25 | 29 | 41 |
|  | LL | -7,635 | -7,596 | -3,870 | -3,859 |
|  | AIC | 15,312 | 15,241 | 7,797 | 7,800 |
|  | BIC | 15,404 | 15,351 | 7,884 | 7,924 |

## symbol

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 311.44 (13.06) <.01 | 293.53 (20.69) <.01 | 327.85 (24.34) <.01 | 338.88 (25.75) <.01 | 333.18 (26.59) <.01 |
| a | Slope | -11.58 (2.77) <.01 | -5.54 (5.62) .32 | -23.55 (7.43) <.01 | -25.21 (8.42) <.01 | -23.53 (9.30) .01 |
| a | Level \* age | -4.29 (1.33) <.01 | -3.86 (1.41) .01 | -4.09 (1.78) .02 | -4.13 (1.83) .02 | -4.27 (1.83) .02 |
| a | Level \* education | --- | 1.19 (2.35) .61 | -1.15 (2.70) .67 | -1.63 (2.76) .56 | -1.61 (2.76) .56 |
| a | Level \* height | --- | --- | 0.37 (1.15) .75 | 0.26 (1.21) .83 | 0.13 (1.22) .91 |
| a | Level \* smoking | --- | --- | --- | -0.14 (15.61) .99 | 0.00 (15.99) .99 |
| a | Level \* cardio | --- | --- | --- | -23.26 (31.20) .46 | -24.20 (31.60) .44 |
| a | Level \* diabetes | --- | --- | --- | -22.93 (25.83) .38 | -24.36 (26.24) .35 |
| a | Slope \* age | -0.23 (0.34) .51 | -0.40 (0.41) .34 | 0.11 (0.56) .84 | 0.10 (0.62) .88 | 0.14 (0.62) .83 |
| a | Slope \* education | --- | -0.42 (0.73) .56 | 0.29 (0.91) .75 | 0.38 (0.94) .68 | 0.41 (0.98) .68 |
| a | Slope \* height | --- | --- | 0.64 (0.40) .11 | 0.68 (0.41) .09 | 0.73 (0.41) .08 |
| a | Slope \* smoking | --- | --- | --- | 1.74 (4.92) .72 | 1.75 (5.38) .74 |
| a | Slope \* cardio | --- | --- | --- | 3.28 (12.12) .79 | 3.07 (11.47) .79 |
| a | Slope \* diabetes | --- | --- | --- | -2.34 (9.13) .80 | -2.07 (9.40) .83 |
| b | Level | 45.33 (1.24) <.01 | 32.42 (1.63) <.01 | 39.06 (3.07) <.01 | 40.61 (3.40) <.01 | 40.57 (3.68) <.01 |
| b | Slope | 0.54 (0.21) .01 | 1.16 (0.44) .01 | 0.56 (0.59) .34 | 0.60 (0.68) .38 | 0.62 (0.78) .42 |
| b | Level \* age | -0.59 (0.13) <.01 | -0.57 (0.11) <.01 | -0.35 (0.27) .20 | -0.38 (0.27) .17 | -0.38 (0.28) .17 |
| b | Level \* education | --- | 2.02 (0.17) <.01 | 1.89 (0.35) <.01 | 1.79 (0.36) <.01 | 1.79 (0.38) <.01 |
| b | Level \* height | --- | --- | 0.08 (0.18) .66 | 0.05 (0.19) .78 | 0.05 (0.19) .78 |
| b | Level \* smoking | --- | --- | --- | 2.19 (1.95) .26 | 2.19 (2.01) .27 |
| b | Level \* cardio | --- | --- | --- | -4.95 (8.14) .54 | -4.96 (8.15) .54 |
| b | Level \* diabetes | --- | --- | --- | -6.73 (2.75) .01 | -6.75 (2.82) .02 |
| b | Slope \* age | -0.06 (0.02) .02 | -0.04 (0.03) .09 | -0.06 (0.04) .08 | -0.06 (0.04) .09 | -0.06 (0.04) .12 |
| b | Slope \* education | --- | -0.09 (0.05) .06 | -0.06 (0.07) .40 | -0.06 (0.08) .44 | -0.06 (0.09) .48 |
| b | Slope \* height | --- | --- | 0.00 (0.03) .90 | 0.01 (0.04) .89 | 0.00 (0.04) .91 |
| b | Slope \* smoking | --- | --- | --- | 0.09 (0.45) .83 | 0.09 (0.48) .85 |
| b | Slope \* cardio | --- | --- | --- | 0.00 (1.34) .99 | 0.00 (1.37) .99 |
| b | Slope \* diabetes | --- | --- | --- | -0.26 (0.52) .63 | -0.24 (0.56) .66 |
| a | Var (Level) | 5314.26 (886.62) <.01 | 5924.42 (1072.31) <.01 | 4906.13 (1072.06) <.01 | 4709.73 (1105.26) <.01 | 4692.97 (1099.11) <.01 |
| a | Var (Slope) | 152.53 (39.36) <.01 | 257.04 (66.08) <.01 | 117.67 (64.73) .07 | 103.05 (66.91) .12 | 102.83 (69.68) .14 |
| a | Var (Residual) | 1665.82 (53.18) <.01 | 1539.24 (60.16) <.01 | 1618.46 (83.00) <.01 | 1625.48 (95.71) <.01 | 1617.21 (98.54) <.01 |
| a | Covar (Level, Slope) | -520.59 (153.38) <.01 | -811.76 (241.28) <.01 | -416.41 (219.35) .06 | -390.70 (223.92) .08 | -385.95 (225.58) .09 |
| b | Var (Level) | 189.81 (14.19) <.01 | 143.96 (11.26) <.01 | 127.61 (23.26) <.01 | 112.32 (20.21) <.01 | 114.18 (21.13) <.01 |
| b | Var (Slope) | 1.31 (0.28) <.01 | 1.77 (0.39) <.01 | 0.36 (0.50) .47 | 0.30 (0.55) .59 | 0.45 (0.63) .47 |
| b | Var (Residual) | 31.68 (1.23) <.01 | 30.30 (1.32) <.01 | 28.75 (2.01) <.01 | 28.80 (2.19) <.01 | 28.50 (2.24) <.01 |
| b | Covar (Level, Slope) | -6.08 (2.24) .01 | -5.11 (2.05) .01 | -1.49 (3.01) .62 | -1.71 (2.88) .55 | -2.31 (3.06) .45 |
| ab | Covar (Levels) | 331.92 (108.27) <.01 | 342.04 (106.57) <.01 | 262.59 (126.47) .04 | 215.86 (120.89) .07 | 213.34 (123.52) .08 |
| ab | Covar (Slopes) | 10.97 (3.34) <.01 | 12.46 (4.36) <.01 | 3.53 (4.39) .42 | 2.80 (4.40) .52 | 2.56 (4.92) .60 |
| ab | Covar (Residuals) | -1.96 (15.87) .90 | 1.80 (16.40) .91 | -2.03 (23.02) .93 | -1.93 (24.59) .94 | -2.07 (24.58) .93 |
|  | Correlation of Levels | 0.3305 | 0.3704 | 0.3319 | 0.2968 | 0.2914 |
|  | Correlation of Slopes | 0.7770 | 0.5831 | 0.5397 | 0.5048 | 0.3750 |
|  | Correlation of Residuals | -0.0085 | 0.0084 | -0.0094 | -0.0089 | -0.0096 |
|  | N | 592 | 592 | 150 | 150 | 150 |
|  | occasions | 9 | 7 | 6 | 6 | 6 |
|  | parameters | 21 | 25 | 29 | 41 | 45 |
|  | LL | -10,104 | -9,446 | -4,340 | -4,327 | -4,326 |
|  | AIC | 20,249 | 18,943 | 8,738 | 8,735 | 8,742 |
|  | BIC | 20,341 | 19,052 | 8,826 | 8,859 | 8,878 |

## trailsb

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 319.62 (13.00) <.01 | 313.50 (20.64) <.01 | 332.19 (25.63) <.01 | 344.53 (25.99) <.01 | 338.48 (26.86) <.01 |
| a | Slope | -14.42 (2.89) <.01 | -11.07 (4.82) .02 | -25.89 (6.46) <.01 | -28.33 (7.03) <.01 | -26.65 (7.66) <.01 |
| a | Level \* age | -4.57 (1.31) <.01 | -4.50 (1.31) <.01 | -4.17 (1.83) .02 | -4.25 (1.88) .02 | -4.35 (1.93) .02 |
| a | Level \* education | --- | 1.07 (2.21) .63 | -1.56 (2.65) .56 | -2.10 (2.56) .41 | -2.06 (2.57) .42 |
| a | Level \* height | --- | --- | 0.60 (1.18) .61 | 0.48 (1.22) .69 | 0.35 (1.24) .78 |
| a | Level \* smoking | --- | --- | --- | -0.34 (15.66) .98 | -0.14 (16.04) .99 |
| a | Level \* cardio | --- | --- | --- | -21.55 (29.27) .46 | -22.83 (30.59) .46 |
| a | Level \* diabetes | --- | --- | --- | -26.56 (24.53) .28 | -28.03 (25.56) .27 |
| a | Slope \* age | -0.13 (0.33) .69 | -0.15 (0.33) .64 | 0.14 (0.44) .76 | 0.14 (0.54) .80 | 0.15 (0.53) .77 |
| a | Slope \* education | --- | -0.54 (0.58) .35 | 0.54 (0.70) .44 | 0.68 (0.74) .36 | 0.70 (0.75) .35 |
| a | Slope \* height | --- | --- | 0.51 (0.27) .05 | 0.57 (0.27) .04 | 0.61 (0.28) .03 |
| a | Slope \* smoking | --- | --- | --- | 1.89 (3.69) .61 | 1.88 (4.02) .64 |
| a | Slope \* cardio | --- | --- | --- | 2.45 (9.40) .79 | 2.44 (9.21) .79 |
| a | Slope \* diabetes | --- | --- | --- | -0.31 (8.60) .97 | -0.06 (9.22) .99 |
| b | Level | 125.49 (7.24) <.01 | 175.12 (7.45) <.01 | 171.28 (18.58) <.01 | 163.08 (21.45) <.01 | 172.13 (21.87) <.01 |
| b | Slope | 0.80 (1.30) .54 | -0.55 (2.05) .79 | 2.42 (5.06) .63 | 2.91 (6.20) .64 | 2.73 (6.22) .66 |
| b | Level \* age | 2.50 (0.64) <.01 | 2.31 (0.58) <.01 | 1.63 (1.38) .24 | 1.81 (1.45) .21 | 2.06 (1.48) .16 |
| b | Level \* education | --- | -7.73 (0.90) <.01 | -7.82 (2.03) <.01 | -7.22 (2.22) <.01 | -7.32 (2.27) <.01 |
| b | Level \* height | --- | --- | -0.04 (0.78) .96 | 0.10 (0.88) .91 | 0.27 (0.92) .76 |
| b | Level \* smoking | --- | --- | --- | -11.54 (10.43) .27 | -11.97 (9.91) .23 |
| b | Level \* cardio | --- | --- | --- | 26.85 (19.19) .16 | 29.70 (21.00) .16 |
| b | Level \* diabetes | --- | --- | --- | 31.07 (16.68) .06 | 33.33 (17.81) .06 |
| b | Slope \* age | 0.29 (0.14) .04 | 0.30 (0.14) .04 | 0.21 (0.27) .43 | 0.20 (0.34) .56 | 0.19 (0.34) .58 |
| b | Slope \* education | --- | 0.20 (0.21) .33 | -0.05 (0.57) .93 | -0.11 (0.62) .86 | -0.11 (0.61) .86 |
| b | Slope \* height | --- | --- | 0.02 (0.18) .89 | -0.00 (0.21) .98 | -0.01 (0.22) .97 |
| b | Slope \* smoking | --- | --- | --- | -0.32 (2.73) .91 | -0.31 (2.98) .92 |
| b | Slope \* cardio | --- | --- | --- | -1.92 (6.48) .77 | -2.00 (6.44) .76 |
| b | Slope \* diabetes | --- | --- | --- | 2.62 (4.55) .56 | 2.66 (5.06) .60 |
| a | Var (Level) | 5503.46 (922.85) <.01 | 5447.84 (926.92) <.01 | 4821.22 (1077.52) <.01 | 4630.56 (1107.26) <.01 | 4624.91 (1121.08) <.01 |
| a | Var (Slope) | 130.76 (35.96) <.01 | 124.33 (35.54) <.01 | 48.62 (27.63) .08 | 39.51 (32.43) .22 | 39.51 (33.94) .24 |
| a | Var (Residual) | 1683.17 (52.72) <.01 | 1681.28 (52.10) <.01 | 1690.11 (79.14) <.01 | 1693.29 (88.95) <.01 | 1684.30 (89.20) <.01 |
| a | Covar (Level, Slope) | -518.71 (152.31) <.01 | -491.83 (158.00) <.01 | -324.32 (139.94) .02 | -306.53 (168.09) .07 | -305.61 (167.55) .07 |
| b | Var (Level) | 3389.97 (471.25) <.01 | 2698.95 (377.73) <.01 | 2724.82 (689.38) <.01 | 2356.32 (716.30) <.01 | 2258.31 (713.54) <.01 |
| b | Var (Slope) | 6.98 (9.28) .45 | 7.33 (9.45) .44 | 7.46 (16.87) .66 | 5.91 (19.07) .76 | 5.73 (18.88) .76 |
| b | Var (Residual) | 1740.06 (48.32) <.01 | 1740.02 (48.04) <.01 | 1478.80 (71.16) <.01 | 1475.27 (76.02) <.01 | 1475.00 (76.52) <.01 |
| b | Covar (Level, Slope) | 32.29 (68.53) .64 | 45.66 (66.49) .49 | 49.10 (103.59) .64 | 44.85 (135.15) .74 | 46.60 (133.62) .73 |
| ab | Covar (Levels) | -1437.76 (540.87) .01 | -1308.71 (509.10) .01 | -1005.15 (664.43) .13 | -781.69 (661.61) .24 | -731.95 (659.29) .27 |
| ab | Covar (Slopes) | -11.72 (15.69) .46 | -11.07 (16.06) .49 | -4.41 (27.72) .87 | -0.54 (29.25) .98 | -0.25 (28.09) .99 |
| ab | Covar (Residuals) | 17.39 (148.22) .91 | 13.54 (154.65) .93 | -80.60 (224.45) .72 | -78.15 (239.81) .74 | -80.64 (247.59) .74 |
|  | Correlation of Levels | -0.33 | -0.3413 | -0.277 | -0.237 | -0.226 |
|  | Correlation of Slopes | -0.39 | -0.3667 | -0.231 | -0.036 | -0.016 |
|  | Correlation of Residuals | 0.01 | 0.0079 | -0.051 | -0.049 | -0.051 |
|  | N | 580 | 580 | 150 | 150 | 150 |
|  | occasions | 9 | 9 | 8 | 8 | 8 |
|  | parameters | 21 | 25 | 29 | 41 | 45 |
|  | LL | -13,187 | -13,142 | -5,891 | -5,878 | -5,875 |
|  | AIC | 26,416 | 26,333 | 11,840 | 11,838 | 11,840 |
|  | BIC | 26,507 | 26,442 | 11,928 | 11,961 | 11,975 |

## Summary

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

Computed correlations:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus | full |
| Correlation of Levels | block | . | 0.19 | 0.21 | 0.19 | 0.19 |
| Correlation of Levels | digit\_tot | 0.01 | -0.01 | -0.10 | -0.15 | . |
| Correlation of Levels | symbol | 0.33 | 0.37 | 0.33 | 0.30 | 0.29 |
| Correlation of Levels | trailsb | -0.33 | -0.34 | -0.28 | -0.24 | -0.23 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus | full |
| Correlation of Slopes | block | . | 0.67 | 0.08 | 0.15 | 0.19 |
| Correlation of Slopes | digit\_tot | 0.31 | 0.28 | -0.51 | -0.48 | . |
| Correlation of Slopes | symbol | 0.78 | 0.58 | 0.54 | 0.50 | 0.37 |
| Correlation of Slopes | trailsb | -0.39 | -0.37 | -0.23 | -0.04 | -0.02 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus | full |
| Correlation of Residuals | block | . | -0.00 | -0.01 | -0.00 | 0.00 |
| Correlation of Residuals | digit\_tot | 0.01 | 0.01 | 0.07 | 0.06 | . |
| Correlation of Residuals | symbol | -0.01 | 0.01 | -0.01 | -0.01 | -0.01 |
| Correlation of Residuals | trailsb | 0.01 | 0.01 | -0.05 | -0.05 | -0.05 |

P-values for corresponding covariances:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus | full |
| Covariance of Levels | block | . | 0.05 | 0.04 | 0.27 | 0.26 |
| Covariance of Levels | digit\_tot | 0.91 | 0.97 | 0.50 | 0.38 | . |
| Covariance of Levels | symbol | 0.00 | 0.00 | 0.04 | 0.07 | 0.08 |
| Covariance of Levels | trailsb | 0.01 | 0.01 | 0.13 | 0.24 | 0.27 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus | full |
| Covariance of Slopes | block | . | 0.00 | 0.85 | 0.86 | 0.84 |
| Covariance of Slopes | digit\_tot | 0.25 | 0.30 | 0.40 | 0.53 | . |
| Covariance of Slopes | symbol | 0.00 | 0.00 | 0.42 | 0.52 | 0.60 |
| Covariance of Slopes | trailsb | 0.46 | 0.49 | 0.87 | 0.98 | 0.99 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus | full |
| Covariance of Residuals | block | . | 0.97 | 0.90 | 0.98 | 0.98 |
| Covariance of Residuals | digit\_tot | 0.86 | 0.88 | 0.50 | 0.62 | . |
| Covariance of Residuals | symbol | 0.90 | 0.91 | 0.93 | 0.94 | 0.93 |
| Covariance of Residuals | trailsb | 0.91 | 0.93 | 0.72 | 0.74 | 0.74 |

# male

Gender = *male*; Model type: *aehplus*; Process (a) = *pef*; Process (b): *block*, *digit\_tot*, *symbol*, *trailsb*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | block | digit\_tot | symbol | trailsb | mean(sd) |
| a | Level | 454.50 (91.23) <.01 | 454.76 (89.94) <.01 | 442.71 (90.71) <.01 | 445.39 (93.94) <.01 | 449.34(6.21) |
| a | Slope | -34.23 (25.43) .18 | -37.40 (32.26) .25 | -27.75 (39.85) .49 | -29.81 (37.75) .43 | -32.30(4.35) |
| a | Level \* age | -6.21 (6.66) .35 | -4.80 (6.53) .46 | -5.08 (5.57) .36 | -5.22 (7.35) .48 | -5.33(0.61) |
| a | Level \* education | 5.33 (7.87) .50 | 3.70 (9.13) .69 | 5.17 (8.03) .52 | 4.82 (7.49) .52 | 4.75(0.74) |
| a | Level \* height | 3.87 (4.10) .34 | 3.40 (3.53) .34 | 3.32 (3.36) .32 | 3.20 (3.94) .42 | 3.45(0.30) |
| a | Level \* smoking | -31.74 (72.57) .66 | -33.65 (62.68) .59 | -26.75 (70.38) .70 | -26.71 (70.41) .70 | -29.71(3.53) |
| a | Level \* cardio | -21.55 (74.63) .77 | -36.52 (82.98) .66 | -21.97 (84.30) .79 | -25.84 (69.97) .71 | -26.47(6.97) |
| a | Level \* diabetes | -15.64 (64.89) .81 | -9.25 (63.29) .88 | -19.72 (50.23) .69 | -7.57 (64.27) .91 | -13.05(5.65) |
| a | Slope \* age | 1.02 (1.85) .58 | 0.42 (2.75) .88 | 0.41 (2.39) .86 | 0.46 (2.64) .86 | 0.58(0.30) |
| a | Slope \* education | 0.22 (1.88) .91 | 1.16 (2.05) .57 | 0.22 (2.31) .92 | 0.42 (2.26) .85 | 0.50(0.44) |
| a | Slope \* height | -0.59 (1.37) .67 | -0.18 (1.28) .89 | -0.21 (1.41) .88 | -0.16 (1.33) .90 | -0.28(0.21) |
| a | Slope \* smoking | 4.51 (14.59) .76 | 5.57 (20.05) .78 | 2.17 (20.00) .91 | 3.04 (20.89) .88 | 3.82(1.51) |
| a | Slope \* cardio | -4.70 (20.59) .82 | 9.19 (19.07) .63 | -3.33 (43.32) .94 | -0.54 (23.74) .98 | 0.16(6.27) |
| a | Slope \* diabetes | -0.58 (21.59) .98 | -3.26 (17.68) .85 | 0.88 (19.25) .96 | -5.23 (22.14) .81 | -2.05(2.73) |
| b | Level | 24.22 (7.97) <.01 | 12.89 (3.53) <.01 | 40.95 (7.83) <.01 | 153.89 (58.29) .01 | --- |
| b | Slope | 1.40 (1.75) .42 | -0.10 (0.67) .88 | 0.48 (2.24) .83 | 3.49 (13.75) .80 | --- |
| b | Level \* age | 0.25 (0.45) .58 | -0.03 (0.16) .87 | -0.19 (0.37) .61 | 1.17 (2.71) .66 | --- |
| b | Level \* education | 0.58 (0.53) .28 | 0.34 (0.24) .16 | 1.24 (0.67) .06 | -6.30 (4.34) .15 | --- |
| b | Level \* height | 0.04 (0.19) .85 | -0.14 (0.08) .07 | 0.09 (0.26) .73 | -0.53 (1.70) .76 | --- |
| b | Level \* smoking | -3.94 (3.47) .26 | 1.22 (1.74) .48 | -0.04 (4.74) .99 | -0.57 (37.27) .99 | --- |
| b | Level \* cardio | 0.32 (3.77) .93 | 0.50 (1.64) .76 | -4.36 (5.62) .44 | 21.94 (28.88) .45 | --- |
| b | Level \* diabetes | -3.76 (5.25) .47 | -1.15 (1.71) .50 | -4.04 (4.60) .38 | 1.35 (20.85) .95 | --- |
| b | Slope \* age | -0.08 (0.10) .39 | 0.01 (0.04) .74 | -0.02 (0.10) .86 | 0.10 (0.66) .88 | --- |
| b | Slope \* education | -0.09 (0.11) .44 | -0.00 (0.04) .95 | -0.14 (0.19) .48 | 0.17 (0.97) .86 | --- |
| b | Slope \* height | -0.03 (0.04) .48 | 0.01 (0.02) .66 | 0.01 (0.07) .85 | 0.36 (0.42) .40 | --- |
| b | Slope \* smoking | 0.25 (0.78) .75 | -0.16 (0.33) .63 | 0.10 (0.95) .91 | -2.20 (9.45) .81 | --- |
| b | Slope \* cardio | 0.22 (1.57) .89 | 0.03 (0.61) .96 | 0.40 (1.65) .81 | -8.71 (9.83) .38 | --- |
| b | Slope \* diabetes | -0.42 (1.22) .73 | -0.02 (0.49) .97 | 0.13 (1.26) .92 | 4.88 (6.45) .45 | --- |
| a | Var (Level) | 12688.87 (6239.69) .04 | 12608.75 (7324.58) .08 | 10663.47 (5947.85) .07 | 11883.57 (5402.90) .03 | 11961.16(937.90) |
| a | Var (Slope) | 203.28 (383.57) .60 | 369.75 (629.79) .56 | 141.18 (577.72) .81 | 225.26 (476.59) .64 | 234.87(96.72) |
| a | Var (Residual) | 4549.81 (797.42) <.01 | 4129.74 (642.44) <.01 | 4607.43 (1195.60) <.01 | 4299.90 (600.71) <.01 | 4396.72(222.48) |
| a | Covar (Level, Slope) | -903.63 (1259.50) .47 | -985.61 (1641.07) .55 | -357.18 (1455.27) .81 | -705.04 (1369.29) .61 | -737.86(279.80) |
| b | Var (Level) | 42.09 (20.26) .04 | 10.50 (3.69) <.01 | 69.59 (33.46) .04 | 1543.36 (843.99) .07 | --- |
| b | Var (Slope) | 0.02 (0.57) .97 | 0.06 (0.06) .39 | 1.85 (1.59) .24 | 13.59 (33.43) .68 | --- |
| b | Var (Residual) | 23.73 (3.04) <.01 | 2.58 (0.43) <.01 | 24.28 (4.20) <.01 | 1673.38 (173.16) <.01 | --- |
| b | Covar (Level, Slope) | -0.60 (3.19) .85 | -0.53 (0.56) .34 | -0.09 (5.53) .99 | -68.12 (197.81) .73 | --- |
| ab | Covar (Levels) | -165.36 (340.93) .63 | -77.93 (132.76) .56 | -8.45 (313.97) .98 | 1194.13 (1879.70) .52 | --- |
| ab | Covar (Slopes) | -1.10 (15.01) .94 | -4.14 (5.13) .42 | -4.97 (19.70) .80 | 19.54 (145.95) .89 | --- |
| ab | Covar (Residuals) | 31.73 (63.31) .62 | 20.81 (16.48) .21 | 17.31 (73.82) .81 | -279.10 (856.01) .74 | --- |
|  | Correlation of Levels | -0.226 | -0.21 | -0.0098 | 0.28 | -0.04(0.24) |
|  | Correlation of Slopes | -0.499 | -0.91 | -0.3075 | 0.35 | -0.34(0.53) |
|  | Correlation of Residuals | 0.097 | 0.20 | 0.0518 | -0.10 | 0.06(0.13) |
|  | N | 72 | 72 | 72 | 72 | 72.00(0.00) |
|  | occasions | 8 | 8 | 6 | 8 | 7.50(1.00) |
|  | parameters | 41 | 41 | 41 | 41 | 41.00(0.00) |
|  | LL | -2,534 | -2,177 | -2,417 | -3,272 | -2,600(472) |
|  | AIC | 5,150 | 4,436 | 4,916 | 6,625 | 5,282(944) |
|  | BIC | 5,243 | 4,529 | 5,009 | 6,719 | 5,375(944) |

## block

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| process | label | ae | aeh | aehplus |
| a | Level | 468.26 (40.46) <.01 | 412.91 (49.38) <.01 | 454.50 (91.23) <.01 |
| a | Slope | -18.94 (8.62) .03 | -29.25 (10.46) <.01 | -34.23 (25.43) .18 |
| a | Level \* age | -4.66 (2.91) .11 | -5.16 (3.10) .10 | -6.21 (6.66) .35 |
| a | Level \* education | 0.38 (4.09) .93 | 5.99 (4.49) .18 | 5.33 (7.87) .50 |
| a | Level \* height | --- | 3.87 (2.76) .16 | 3.87 (4.10) .34 |
| a | Level \* smoking | --- | --- | -31.74 (72.57) .66 |
| a | Level \* cardio | --- | --- | -21.55 (74.63) .77 |
| a | Level \* diabetes | --- | --- | -15.64 (64.89) .81 |
| a | Slope \* age | -0.19 (0.61) .76 | 0.61 (0.79) .44 | 1.02 (1.85) .58 |
| a | Slope \* education | -0.02 (1.00) .98 | 0.36 (1.10) .74 | 0.22 (1.88) .91 |
| a | Slope \* height | --- | -0.64 (1.35) .63 | -0.59 (1.37) .67 |
| a | Slope \* smoking | --- | --- | 4.51 (14.59) .76 |
| a | Slope \* cardio | --- | --- | -4.70 (20.59) .82 |
| a | Slope \* diabetes | --- | --- | -0.58 (21.59) .98 |
| b | Level | 20.52 (1.03) <.01 | 19.31 (3.81) <.01 | 24.22 (7.97) <.01 |
| b | Slope | 0.90 (0.26) <.01 | 1.57 (1.53) .31 | 1.40 (1.75) .42 |
| b | Level \* age | -0.02 (0.11) .88 | 0.31 (0.35) .38 | 0.25 (0.45) .58 |
| b | Level \* education | 0.01 (0.03) .86 | 0.73 (0.30) .02 | 0.58 (0.53) .28 |
| b | Level \* height | --- | 0.01 (0.28) .97 | 0.04 (0.19) .85 |
| b | Level \* smoking | --- | --- | -3.94 (3.47) .26 |
| b | Level \* cardio | --- | --- | 0.32 (3.77) .93 |
| b | Level \* diabetes | --- | --- | -3.76 (5.25) .47 |
| b | Slope \* age | -0.05 (0.02) <.01 | -0.08 (0.17) .62 | -0.08 (0.10) .39 |
| b | Slope \* education | -0.00 (0.03) .97 | -0.10 (0.12) .42 | -0.09 (0.11) .44 |
| b | Slope \* height | --- | -0.04 (0.14) .81 | -0.03 (0.04) .48 |
| b | Slope \* smoking | --- | --- | 0.25 (0.78) .75 |
| b | Slope \* cardio | --- | --- | 0.22 (1.57) .89 |
| b | Slope \* diabetes | --- | --- | -0.42 (1.22) .73 |
| a | Var (Level) | 12369.76 (3034.59) <.01 | 12541.22 (3161.93) <.01 | 12688.87 (6239.69) .04 |
| a | Var (Slope) | 207.90 (118.40) .08 | 204.82 (213.03) .34 | 203.28 (383.57) .60 |
| a | Var (Residual) | 4750.71 (840.79) <.01 | 4397.04 (1166.62) <.01 | 4549.81 (797.42) <.01 |
| a | Covar (Level, Slope) | -767.90 (619.22) .21 | -776.24 (651.36) .23 | -903.63 (1259.50) .47 |
| b | Var (Level) | 76.62 (7.95) <.01 | 46.25 (13.11) <.01 | 42.09 (20.26) .04 |
| b | Var (Slope) | 0.15 (0.15) .31 | 0.03 (7.94) .99 | 0.02 (0.57) .97 |
| b | Var (Residual) | 22.19 (1.50) <.01 | 23.78 (9.55) .01 | 23.73 (3.04) <.01 |
| b | Covar (Level, Slope) | -2.12 (1.19) .07 | 0.01 (12.80) .99 | -0.60 (3.19) .85 |
| ab | Covar (Levels) | -122.43 (137.12) .37 | -89.80 (125.58) .47 | -165.36 (340.93) .63 |
| ab | Covar (Slopes) | -0.17 (3.37) .96 | -0.13 (18.94) .99 | -1.10 (15.01) .94 |
| ab | Covar (Residuals) | 7.05 (22.67) .76 | 28.00 (36.76) .45 | 31.73 (63.31) .62 |
|  | Correlation of Levels | -0.126 | -0.118 | -0.226 |
|  | Correlation of Slopes | -0.031 | -0.052 | -0.499 |
|  | Correlation of Residuals | 0.022 | 0.087 | 0.097 |
|  | N | 350 | 72 | 72 |
|  | occasions | 9 | 8 | 8 |
|  | parameters | 25 | 29 | 41 |
|  | LL | -5,823 | -2,542 | -2,534 |
|  | AIC | 11,697 | 5,143 | 5,150 |
|  | BIC | 11,793 | 5,209 | 5,243 |

## digit\_tot

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 454.79 (29.61) <.01 | 436.64 (46.16) <.01 | 412.12 (66.58) <.01 | 454.76 (89.94) <.01 | 477.18 (153.24) <.01 |
| a | Slope | -15.22 (9.10) .10 | -12.33 (13.96) .38 | -31.06 (27.15) .25 | -37.40 (32.26) .25 | -37.62 (40.31) .35 |
| a | Level \* age | -3.64 (3.32) .27 | -3.64 (3.30) .27 | -4.29 (5.78) .46 | -4.80 (6.53) .46 | -5.20 (7.38) .48 |
| a | Level \* education | --- | 2.45 (5.00) .62 | 4.90 (7.21) .50 | 3.70 (9.13) .69 | 3.62 (9.86) .71 |
| a | Level \* height | --- | --- | 3.31 (3.02) .27 | 3.40 (3.53) .34 | 3.48 (4.64) .45 |
| a | Level \* smoking | --- | --- | --- | -33.65 (62.68) .59 | -42.30 (110.78) .70 |
| a | Level \* cardio | --- | --- | --- | -36.52 (82.98) .66 | -30.08 (93.01) .75 |
| a | Level \* diabetes | --- | --- | --- | -9.25 (63.29) .88 | -1.12 (61.35) .98 |
| a | Slope \* age | -0.56 (0.94) .55 | -0.56 (1.01) .58 | 0.34 (2.25) .88 | 0.42 (2.75) .88 | 0.45 (2.93) .88 |
| a | Slope \* education | --- | -0.39 (1.08) .72 | 0.98 (1.57) .53 | 1.16 (2.05) .57 | 1.15 (2.42) .64 |
| a | Slope \* height | --- | --- | -0.19 (0.98) .85 | -0.18 (1.28) .89 | -0.20 (2.08) .92 |
| a | Slope \* smoking | --- | --- | --- | 5.57 (20.05) .78 | 5.88 (23.22) .80 |
| a | Slope \* cardio | --- | --- | --- | 9.19 (19.07) .63 | 9.02 (23.38) .70 |
| a | Slope \* diabetes | --- | --- | --- | -3.26 (17.68) .85 | -3.37 (20.12) .87 |
| b | Level | 13.76 (0.39) <.01 | 13.75 (0.40) <.01 | 14.09 (2.16) <.01 | 12.89 (3.53) <.01 | 13.69 (3.84) <.01 |
| b | Slope | 0.19 (0.08) .02 | 0.16 (0.11) .14 | -0.34 (0.42) .42 | -0.10 (0.67) .88 | -0.31 (0.80) .70 |
| b | Level \* age | -0.03 (0.04) .50 | -0.03 (0.04) .50 | -0.06 (0.14) .69 | -0.03 (0.16) .87 | -0.04 (0.19) .83 |
| b | Level \* education | --- | 0.00 (0.01) .98 | 0.29 (0.19) .13 | 0.34 (0.24) .16 | 0.33 (0.26) .20 |
| b | Level \* height | --- | --- | -0.15 (0.07) .03 | -0.14 (0.08) .07 | -0.12 (0.09) .15 |
| b | Level \* smoking | --- | --- | --- | 1.22 (1.74) .48 | 0.91 (1.95) .64 |
| b | Level \* cardio | --- | --- | --- | 0.50 (1.64) .76 | 0.66 (1.78) .71 |
| b | Level \* diabetes | --- | --- | --- | -1.15 (1.71) .50 | -0.82 (1.92) .67 |
| b | Slope \* age | -0.00 (0.01) .62 | -0.00 (0.01) .63 | 0.02 (0.03) .49 | 0.01 (0.04) .74 | 0.02 (0.04) .67 |
| b | Slope \* education | --- | 0.00 (0.01) .70 | 0.01 (0.03) .84 | -0.00 (0.04) .95 | 0.00 (0.05) .98 |
| b | Slope \* height | --- | --- | 0.01 (0.01) .40 | 0.01 (0.02) .66 | 0.00 (0.02) .91 |
| b | Slope \* smoking | --- | --- | --- | -0.16 (0.33) .63 | -0.09 (0.38) .81 |
| b | Slope \* cardio | --- | --- | --- | 0.03 (0.61) .96 | 0.03 (0.64) .96 |
| b | Slope \* diabetes | --- | --- | --- | -0.02 (0.49) .97 | -0.10 (0.58) .86 |
| a | Var (Level) | 12724.37 (3116.69) <.01 | 12613.78 (3355.28) <.01 | 12625.82 (5395.72) .02 | 12608.75 (7324.58) .08 | 12472.82 (8409.86) .14 |
| a | Var (Slope) | 282.59 (137.18) .04 | 288.30 (153.70) .06 | 375.76 (442.97) .40 | 369.75 (629.79) .56 | 366.50 (775.59) .64 |
| a | Var (Residual) | 4844.77 (353.36) <.01 | 4854.50 (356.20) <.01 | 4192.50 (487.00) <.01 | 4129.74 (642.44) <.01 | 4119.94 (715.76) <.01 |
| a | Covar (Level, Slope) | -980.03 (477.68) .04 | -985.11 (503.33) .05 | -931.01 (1187.26) .43 | -985.61 (1641.07) .55 | -1003.17 (1990.62) .61 |
| b | Var (Level) | 12.48 (1.25) <.01 | 12.48 (1.25) <.01 | 11.10 (3.37) <.01 | 10.50 (3.69) <.01 | 10.46 (4.10) .01 |
| b | Var (Slope) | 0.02 (0.03) .40 | 0.02 (0.03) .37 | 0.10 (0.08) .21 | 0.06 (0.06) .39 | 0.05 (0.12) .66 |
| b | Var (Residual) | 3.10 (0.17) <.01 | 3.09 (0.17) <.01 | 2.48 (0.37) <.01 | 2.58 (0.43) <.01 | 2.56 (0.42) <.01 |
| b | Covar (Level, Slope) | -0.34 (0.19) .07 | -0.36 (0.19) .06 | -0.62 (0.55) .26 | -0.53 (0.56) .34 | -0.51 (0.77) .50 |
| ab | Covar (Levels) | -70.53 (80.52) .38 | -79.11 (82.09) .34 | -103.44 (109.85) .35 | -77.93 (132.76) .56 | -81.43 (142.00) .57 |
| ab | Covar (Slopes) | -1.66 (2.07) .42 | -1.73 (2.25) .44 | -5.04 (4.14) .22 | -4.14 (5.13) .42 | -4.07 (5.22) .43 |
| ab | Covar (Residuals) | 16.61 (8.93) .06 | 16.90 (9.43) .07 | 21.52 (14.71) .14 | 20.81 (16.48) .21 | 20.51 (20.13) .31 |
|  | Correlation of Levels | -0.18 | -0.20 | -0.28 | -0.21 | -0.23 |
|  | Correlation of Slopes | -0.67 | -0.66 | -0.81 | -0.91 | -0.94 |
|  | Correlation of Residuals | 0.14 | 0.14 | 0.21 | 0.20 | 0.20 |
|  | N | 379 | 379 | 72 | 72 | 72 |
|  | occasions | 8 | 8 | 7 | 8 | 8 |
|  | parameters | 21 | 25 | 29 | 41 | 45 |
|  | LL | -4,878 | -4,877 | -2,147 | -2,177 | -2,175 |
|  | AIC | 9,798 | 9,805 | 4,352 | 4,436 | 4,439 |
|  | BIC | 9,881 | 9,903 | 4,418 | 4,529 | 4,542 |

## symbol

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full |
| a | Level | 449.90 (33.34) <.01 | 439.83 (55.76) <.01 | 407.42 (64.29) <.01 | 442.71 (90.71) <.01 | 464.53 (143.13) <.01 |
| a | Slope | -14.85 (9.59) .12 | -12.82 (18.01) .48 | -26.04 (33.48) .44 | -27.75 (39.85) .49 | -26.95 (47.63) .57 |
| a | Level \* age | -4.76 (3.32) .15 | -4.45 (3.68) .23 | -4.66 (4.87) .34 | -5.08 (5.57) .36 | -5.39 (5.87) .36 |
| a | Level \* education | --- | 0.40 (5.41) .94 | 6.08 (6.40) .34 | 5.17 (8.03) .52 | 5.15 (10.03) .61 |
| a | Level \* height | --- | --- | 3.20 (2.81) .25 | 3.32 (3.36) .32 | 3.20 (3.90) .41 |
| a | Level \* smoking | --- | --- | --- | -26.75 (70.38) .70 | -35.26 (87.59) .69 |
| a | Level \* cardio | --- | --- | --- | -21.97 (84.30) .79 | -14.15 (84.51) .87 |
| a | Level \* diabetes | --- | --- | --- | -19.72 (50.23) .69 | -12.34 (59.41) .83 |
| a | Slope \* age | -0.24 (0.95) .80 | -0.40 (1.19) .74 | 0.35 (2.02) .86 | 0.41 (2.39) .86 | 0.39 (2.67) .88 |
| a | Slope \* education | --- | 0.05 (1.41) .97 | 0.22 (2.00) .91 | 0.22 (2.31) .92 | 0.17 (2.46) .94 |
| a | Slope \* height | --- | --- | -0.20 (1.07) .85 | -0.21 (1.41) .88 | -0.11 (1.59) .95 |
| a | Slope \* smoking | --- | --- | --- | 2.17 (20.00) .91 | 2.26 (22.21) .92 |
| a | Slope \* cardio | --- | --- | --- | -3.33 (43.32) .94 | -4.20 (47.52) .93 |
| a | Slope \* diabetes | --- | --- | --- | 0.88 (19.25) .96 | 1.49 (26.15) .95 |
| b | Level | 39.50 (1.32) <.01 | 38.47 (1.48) <.01 | 39.17 (4.82) <.01 | 40.95 (7.83) <.01 | 40.53 (9.49) <.01 |
| b | Slope | 0.47 (0.34) .16 | 1.05 (0.67) .12 | 0.68 (1.62) .68 | 0.48 (2.24) .83 | 0.49 (2.27) .83 |
| b | Level \* age | -0.29 (0.14) .04 | -0.26 (0.14) .06 | -0.20 (0.32) .53 | -0.19 (0.37) .61 | -0.18 (0.39) .64 |
| b | Level \* education | --- | -0.02 (0.08) .83 | 1.27 (0.58) .03 | 1.24 (0.67) .06 | 1.25 (0.74) .09 |
| b | Level \* height | --- | --- | 0.09 (0.25) .73 | 0.09 (0.26) .73 | 0.09 (0.26) .73 |
| b | Level \* smoking | --- | --- | --- | -0.04 (4.74) .99 | 0.13 (5.51) .98 |
| b | Level \* cardio | --- | --- | --- | -4.36 (5.62) .44 | -4.51 (6.34) .48 |
| b | Level \* diabetes | --- | --- | --- | -4.04 (4.60) .38 | -4.21 (4.69) .37 |
| b | Slope \* age | -0.06 (0.04) .11 | -0.07 (0.04) .09 | -0.02 (0.08) .83 | -0.02 (0.10) .86 | -0.02 (0.10) .87 |
| b | Slope \* education | --- | 0.01 (0.08) .91 | -0.14 (0.16) .39 | -0.14 (0.19) .48 | -0.14 (0.20) .50 |
| b | Slope \* height | --- | --- | 0.01 (0.06) .84 | 0.01 (0.07) .85 | 0.01 (0.08) .86 |
| b | Slope \* smoking | --- | --- | --- | 0.10 (0.95) .91 | 0.09 (1.10) .94 |
| b | Slope \* cardio | --- | --- | --- | 0.40 (1.65) .81 | 0.42 (1.71) .81 |
| b | Slope \* diabetes | --- | --- | --- | 0.13 (1.26) .92 | 0.14 (1.32) .91 |
| a | Var (Level) | 12660.93 (3253.44) <.01 | 11511.62 (3715.95) <.01 | 11004.88 (4343.89) .01 | 10663.47 (5947.85) .07 | 10422.16 (6299.55) .10 |
| a | Var (Slope) | 238.03 (126.63) .06 | 216.25 (303.90) .48 | 154.46 (356.16) .66 | 141.18 (577.72) .81 | 143.87 (587.66) .81 |
| a | Var (Residual) | 4727.66 (346.59) <.01 | 5679.66 (579.35) <.01 | 4601.12 (707.03) <.01 | 4607.43 (1195.60) <.01 | 4614.54 (1247.23) <.01 |
| a | Covar (Level, Slope) | -883.37 (461.78) .06 | -693.83 (897.24) .44 | -394.50 (907.27) .66 | -357.18 (1455.27) .81 | -365.61 (1543.45) .81 |
| b | Var (Level) | 156.18 (16.60) <.01 | 147.53 (16.95) <.01 | 75.96 (27.20) <.01 | 69.59 (33.46) .04 | 69.55 (34.24) .04 |
| b | Var (Slope) | 1.44 (0.38) <.01 | 2.02 (0.88) .02 | 1.94 (1.40) .17 | 1.85 (1.59) .24 | 1.85 (1.81) .31 |
| b | Var (Residual) | 28.87 (1.38) <.01 | 28.37 (1.67) <.01 | 24.22 (3.16) <.01 | 24.28 (4.20) <.01 | 24.27 (4.44) <.01 |
| b | Covar (Level, Slope) | -3.58 (2.42) .14 | -2.40 (3.71) .52 | -0.59 (4.64) .90 | -0.09 (5.53) .99 | -0.09 (5.94) .99 |
| ab | Covar (Levels) | 202.38 (275.03) .46 | 254.31 (324.72) .43 | 22.35 (219.05) .92 | -8.45 (313.97) .98 | -11.37 (340.76) .97 |
| ab | Covar (Slopes) | 2.17 (6.18) .72 | 11.27 (11.71) .34 | -5.65 (15.36) .71 | -4.97 (19.70) .80 | -4.70 (22.26) .83 |
| ab | Covar (Residuals) | 14.26 (33.02) .67 | 5.07 (40.65) .90 | 17.96 (55.65) .75 | 17.31 (73.82) .81 | 16.72 (82.66) .84 |
|  | Correlation of Levels | 0.144 | 0.195 | 0.024 | -0.0098 | -0.013 |
|  | Correlation of Slopes | 0.118 | 0.538 | -0.327 | -0.3075 | -0.288 |
|  | Correlation of Residuals | 0.039 | 0.013 | 0.054 | 0.0518 | 0.050 |
|  | N | 377 | 377 | 72 | 72 | 72 |
|  | occasions | 9 | 5 | 6 | 6 | 6 |
|  | parameters | 21 | 25 | 29 | 41 | 45 |
|  | LL | -6,302 | -5,301 | -2,420 | -2,417 | -2,416 |
|  | AIC | 12,646 | 10,651 | 4,898 | 4,916 | 4,922 |
|  | BIC | 12,728 | 10,750 | 4,964 | 5,009 | 5,024 |

## trailsb

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| process | label | ae | aeh | aehplus | full |
| a | Level | 449.46 (48.72) <.01 | 413.57 (61.67) <.01 | 445.39 (93.94) <.01 | 467.80 (151.55) <.01 |
| a | Slope | -16.65 (13.61) .22 | -29.16 (30.96) .35 | -29.81 (37.75) .43 | -29.38 (50.40) .56 |
| a | Level \* age | -4.54 (3.23) .16 | -4.87 (5.25) .35 | -5.22 (7.35) .48 | -5.54 (8.93) .54 |
| a | Level \* education | 1.16 (5.44) .83 | 5.80 (6.35) .36 | 4.82 (7.49) .52 | 4.81 (8.00) .55 |
| a | Level \* height | --- | 3.09 (3.19) .33 | 3.20 (3.94) .42 | 3.10 (4.75) .52 |
| a | Level \* smoking | --- | --- | -26.71 (70.41) .70 | -35.41 (103.71) .73 |
| a | Level \* cardio | --- | --- | -25.84 (69.97) .71 | -18.28 (77.44) .81 |
| a | Level \* diabetes | --- | --- | -7.57 (64.27) .91 | 0.61 (77.01) .99 |
| a | Slope \* age | -0.19 (0.88) .83 | 0.43 (2.02) .83 | 0.46 (2.64) .86 | 0.44 (3.12) .89 |
| a | Slope \* education | -0.01 (1.19) .99 | 0.40 (1.97) .84 | 0.42 (2.26) .85 | 0.38 (2.20) .86 |
| a | Slope \* height | --- | -0.12 (1.03) .91 | -0.16 (1.33) .90 | -0.07 (1.61) .97 |
| a | Slope \* smoking | --- | --- | 3.04 (20.89) .88 | 3.21 (24.96) .90 |
| a | Slope \* cardio | --- | --- | -0.54 (23.74) .98 | -1.17 (24.21) .96 |
| a | Slope \* diabetes | --- | --- | -5.23 (22.14) .81 | -5.08 (33.70) .88 |
| b | Level | 131.50 (9.85) <.01 | 159.64 (30.56) <.01 | 153.89 (58.29) .01 | 160.29 (70.48) .02 |
| b | Slope | 2.26 (3.10) .47 | -0.02 (9.19) .99 | 3.49 (13.75) .80 | 2.94 (17.25) .86 |
| b | Level \* age | 1.90 (0.82) .02 | 1.11 (2.27) .62 | 1.17 (2.71) .66 | 1.09 (3.22) .74 |
| b | Level \* education | 0.29 (0.37) .43 | -6.50 (3.32) .05 | -6.30 (4.34) .15 | -6.31 (5.10) .22 |
| b | Level \* height | --- | -0.66 (1.39) .64 | -0.53 (1.70) .76 | -0.57 (2.04) .78 |
| b | Level \* smoking | --- | --- | -0.57 (37.27) .99 | -3.09 (45.38) .95 |
| b | Level \* cardio | --- | --- | 21.94 (28.88) .45 | 24.23 (34.58) .48 |
| b | Level \* diabetes | --- | --- | 1.35 (20.85) .95 | 3.59 (25.26) .89 |
| b | Slope \* age | 0.14 (0.20) .49 | 0.19 (0.57) .74 | 0.10 (0.66) .88 | 0.10 (0.74) .89 |
| b | Slope \* education | -0.18 (0.34) .60 | 0.30 (0.82) .71 | 0.17 (0.97) .86 | 0.17 (1.08) .88 |
| b | Slope \* height | --- | 0.42 (0.32) .19 | 0.36 (0.42) .40 | 0.38 (0.48) .43 |
| b | Slope \* smoking | --- | --- | -2.20 (9.45) .81 | -1.94 (11.21) .86 |
| b | Slope \* cardio | --- | --- | -8.71 (9.83) .38 | -9.06 (11.69) .44 |
| b | Slope \* diabetes | --- | --- | 4.88 (6.45) .45 | 4.74 (7.00) .50 |
| a | Var (Level) | 12270.35 (3595.63) <.01 | 12393.75 (4933.39) .01 | 11883.57 (5402.90) .03 | 11597.20 (5921.83) .05 |
| a | Var (Slope) | 203.13 (111.33) .07 | 244.43 (352.12) .49 | 225.26 (476.59) .64 | 226.60 (632.86) .72 |
| a | Var (Residual) | 4774.16 (348.56) <.01 | 4309.09 (496.84) <.01 | 4299.90 (600.71) <.01 | 4301.06 (654.03) <.01 |
| a | Covar (Level, Slope) | -760.94 (503.61) .13 | -812.64 (1069.79) .45 | -705.04 (1369.29) .61 | -695.74 (1812.17) .70 |
| b | Var (Level) | 3968.80 (636.03) <.01 | 1632.33 (733.60) .03 | 1543.36 (843.99) .07 | 1526.70 (862.93) .08 |
| b | Var (Slope) | 35.32 (14.12) .01 | 34.69 (29.95) .25 | 13.59 (33.43) .68 | 13.39 (37.07) .72 |
| b | Var (Residual) | 1554.35 (56.69) <.01 | 1652.60 (158.73) <.01 | 1673.38 (173.16) <.01 | 1674.38 (205.62) <.01 |
| b | Covar (Level, Slope) | -147.56 (91.75) .11 | -106.16 (171.63) .54 | -68.12 (197.81) .73 | -67.38 (195.07) .73 |
| ab | Covar (Levels) | -9.52 (1556.25) .99 | 956.14 (1283.00) .46 | 1194.13 (1879.70) .52 | 1129.70 (2255.92) .62 |
| ab | Covar (Slopes) | 20.77 (31.42) .51 | 11.70 (68.11) .86 | 19.54 (145.95) .89 | 20.02 (163.04) .90 |
| ab | Covar (Residuals) | 4.79 (289.00) .99 | -267.66 (634.01) .67 | -279.10 (856.01) .74 | -284.29 (1021.38) .78 |
|  | Correlation of Levels | -0.0014 | 0.21 | 0.28 | 0.27 |
|  | Correlation of Slopes | 0.2452 | 0.13 | 0.35 | 0.36 |
|  | Correlation of Residuals | 0.0018 | -0.10 | -0.10 | -0.11 |
|  | N | 368 | 72 | 72 | 72 |
|  | occasions | 9 | 8 | 8 | 8 |
|  | parameters | 25 | 29 | 41 | 45 |
|  | LL | -8,270 | -3,279 | -3,272 | -3,271 |
|  | AIC | 16,590 | 6,616 | 6,625 | 6,631 |
|  | BIC | 16,688 | 6,682 | 6,719 | 6,734 |

## Summary

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

Computed correlations:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus | full |
| Correlation of Levels | block | . | -0.13 | -0.12 | -0.23 | . |
| Correlation of Levels | digit\_tot | -0.18 | -0.20 | -0.28 | -0.21 | -0.23 |
| Correlation of Levels | symbol | 0.14 | 0.20 | 0.02 | -0.01 | -0.01 |
| Correlation of Levels | trailsb | . | -0.00 | 0.21 | 0.28 | 0.27 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus | full |
| Correlation of Slopes | block | . | -0.03 | -0.05 | -0.50 | . |
| Correlation of Slopes | digit\_tot | -0.67 | -0.66 | -0.81 | -0.91 | -0.94 |
| Correlation of Slopes | symbol | 0.12 | 0.54 | -0.33 | -0.31 | -0.29 |
| Correlation of Slopes | trailsb | . | 0.25 | 0.13 | 0.35 | 0.36 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus | full |
| Correlation of Residuals | block | . | 0.02 | 0.09 | 0.10 | . |
| Correlation of Residuals | digit\_tot | 0.14 | 0.14 | 0.21 | 0.20 | 0.20 |
| Correlation of Residuals | symbol | 0.04 | 0.01 | 0.05 | 0.05 | 0.05 |
| Correlation of Residuals | trailsb | . | 0.00 | -0.10 | -0.10 | -0.11 |

P-values for corresponding covariances:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus | full |
| Covariance of Levels | block | . | 0.37 | 0.47 | 0.63 | . |
| Covariance of Levels | digit\_tot | 0.38 | 0.34 | 0.35 | 0.56 | 0.57 |
| Covariance of Levels | symbol | 0.46 | 0.43 | 0.92 | 0.98 | 0.97 |
| Covariance of Levels | trailsb | . | 0.99 | 0.46 | 0.52 | 0.62 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus | full |
| Covariance of Slopes | block | . | 0.96 | 0.99 | 0.94 | . |
| Covariance of Slopes | digit\_tot | 0.42 | 0.44 | 0.22 | 0.42 | 0.43 |
| Covariance of Slopes | symbol | 0.72 | 0.34 | 0.71 | 0.80 | 0.83 |
| Covariance of Slopes | trailsb | . | 0.51 | 0.86 | 0.89 | 0.90 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| label | process\_b | a | ae | aeh | aehplus | full |
| Covariance of Residuals | block | . | 0.76 | 0.45 | 0.62 | . |
| Covariance of Residuals | digit\_tot | 0.06 | 0.07 | 0.14 | 0.21 | 0.31 |
| Covariance of Residuals | symbol | 0.67 | 0.90 | 0.75 | 0.81 | 0.84 |
| Covariance of Residuals | trailsb | . | 0.99 | 0.67 | 0.74 | 0.78 |

#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\_2.1.0 magrittr\_1.5   
  
loaded via a namespace (and not attached):  
 [1] Rcpp\_0.12.7 munsell\_0.4.3 testit\_0.5 colorspace\_1.2-7 R6\_2.2.0 stringr\_1.1.0   
 [7] highr\_0.6 plyr\_1.8.4 dplyr\_0.5.0 tools\_3.3.1 DT\_0.2 grid\_3.3.1   
[13] gtable\_0.2.0 DBI\_0.5-1 htmltools\_0.3.5 yaml\_2.1.13 lazyeval\_0.2.0 assertthat\_0.1   
[19] digest\_0.6.10 tibble\_1.2 formatR\_1.4 readr\_1.0.0 tidyr\_0.6.0 htmlwidgets\_0.7   
[25] rsconnect\_0.5 evaluate\_0.10 rmarkdown\_1.1 stringi\_1.1.2 scales\_0.4.0