EAS : Seed report

Date: 2016-10-10

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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 | mean(sd) |
| a | Level | 310.35(17.37), <.01 | 333.07(17.93), <.01 | 345.28(25.90), <.01 | 339.07(26.69), <.01 | 331.94(15.23) |
| a | Slope | -10.71(4.20), .01 | -26.73(4.00), <.01 | -28.93(6.91), <.01 | -26.99(7.29), <.01 | -23.34(8.47) |
| a | Level \* age | -4.09(1.22), <.01 | -4.25(1.29), <.01 | -4.31(1.82), .02 | -4.40(1.80), .01 | -4.26(0.13) |
| a | Level \* education | 0.89(1.78), .62 | -1.60(1.88), .39 | -2.15(2.73), .43 | -2.11(2.71), .44 | -1.24(1.44) |
| a | Level \* height | --- | 0.55(0.85), .52 | 0.46(1.28), .72 | 0.32(1.30), .81 | 0.44(0.12) |
| a | Level \* smoking | --- | --- | -0.55(13.18), .97 | -0.33(13.19), .98 | -0.44(0.15) |
| a | Level \* cardio | --- | --- | -21.32(33.26), .52 | -22.61(36.18), .53 | -21.96(0.92) |
| a | Level \* diabetes | --- | --- | -26.31(25.74), .31 | -27.79(25.94), .28 | -27.05(1.05) |
| a | Slope \* age | -0.24(0.26), .35 | 0.19(0.26), .46 | 0.18(0.43), .68 | 0.19(0.42), .64 | 0.08(0.22) |
| a | Slope \* education | -0.40(0.41), .33 | 0.60(0.45), .19 | 0.74(0.77), .34 | 0.74(0.76), .33 | 0.42(0.55) |
| a | Slope \* height | --- | 0.55(0.20), .01 | 0.60(0.26), .02 | 0.64(0.29), .02 | 0.60(0.05) |
| a | Slope \* smoking | --- | --- | 1.91(2.63), .47 | 1.88(3.05), .54 | 1.90(0.02) |
| a | Slope \* cardio | --- | --- | 2.32(10.07), .82 | 2.31(10.17), .82 | 2.32(0.01) |
| a | Slope \* diabetes | --- | --- | -0.53(8.71), .95 | -0.18(9.68), .98 | -0.36(0.24) |
| b | Level | 13.93(0.95), <.01 | 18.43(1.90), <.01 | 18.99(2.49), <.01 | 19.33(2.75), <.01 | 17.67(2.52) |
| b | Slope | 1.12(0.20), <.01 | 0.73(0.37), .05 | 0.78(0.47), .10 | 0.73(0.49), .14 | 0.84(0.19) |
| b | Level \* age | -0.16(0.07), .02 | -0.12(0.15), .41 | -0.15(0.16), .37 | -0.14(0.16), .39 | -0.14(0.02) |
| b | Level \* education | 1.06(0.11), <.01 | 0.92(0.21), <.01 | 0.88(0.26), <.01 | 0.88(0.26), <.01 | 0.93(0.09) |
| b | Level \* height | --- | -0.01(0.09), .89 | -0.01(0.11), .91 | -0.01(0.11), .96 | -0.01(0.00) |
| b | Level \* smoking | --- | --- | 1.52(1.44), .29 | 1.51(1.45), .30 | 1.51(0.01) |
| b | Level \* cardio | --- | --- | -0.38(2.66), .89 | -0.29(2.93), .92 | -0.34(0.06) |
| b | Level \* diabetes | --- | --- | -4.39(2.60), .09 | -4.30(2.58), .10 | -4.35(0.07) |
| b | Slope \* age | -0.03(0.01), .04 | -0.04(0.02), .10 | -0.04(0.03), .18 | -0.04(0.03), .17 | -0.04(0.01) |
| b | Slope \* education | -0.08(0.02), <.01 | -0.07(0.04), .09 | -0.07(0.05), .17 | -0.07(0.05), .18 | -0.07(0.00) |
| b | Slope \* height | --- | -0.01(0.01), .48 | -0.01(0.02), .66 | -0.01(0.02), .63 | -0.01(0.00) |
| b | Slope \* smoking | --- | --- | -0.10(0.28), .72 | -0.10(0.28), .73 | -0.10(0.00) |
| b | Slope \* cardio | --- | --- | -0.07(0.77), .93 | -0.07(0.87), .94 | -0.07(0.00) |
| b | Slope \* diabetes | --- | --- | 0.18(0.44), .69 | 0.16(0.47), .73 | 0.17(0.01) |
| a | Var (Level) | 5212.32(755.47), <.01 | 4780.41(801.53), <.01 | 4619.53(1051.84), <.01 | 4629.68(1058.37), <.01 | 4810.49(277.81) |
| a | Var (Slope) | 119.91(37.08), <.01 | 44.62(31.72), .16 | 37.57(29.43), .20 | 38.91(32.62), .23 | 60.25(39.89) |
| a | Var (Residual) | 1695.37(386.98), <.01 | 1703.01(503.91), <.01 | 1701.95(104.59), <.01 | 1689.57(104.83), <.01 | 1697.47(6.26) |
| a | Covar (Level, Slope) | -454.24(161.68), <.01 | -312.88(173.77), .07 | -303.65(136.78), .03 | -307.89(149.73), .04 | -344.66(73.15) |
| b | Var (Level) | 54.09(4.90), <.01 | 51.46(8.54), <.01 | 46.29(9.11), <.01 | 46.15(9.21), <.01 | 49.50(3.93) |
| b | Var (Slope) | 0.26(0.11), .01 | 0.16(0.14), .26 | 0.14(0.24), .55 | 0.14(0.24), .57 | 0.17(0.06) |
| b | Var (Residual) | 21.49(1.14), <.01 | 19.77(1.49), <.01 | 19.77(1.57), <.01 | 19.77(1.58), <.01 | 20.20(0.86) |
| b | Covar (Level, Slope) | -2.10(0.56), <.01 | -1.21(0.93), .19 | -0.93(1.45), .52 | -0.91(1.46), .53 | -1.29(0.56) |
| ab | Covar (Levels) | 98.99(49.69), .05 | 104.78(52.19), .04 | 86.03(78.62), .27 | 88.17(79.03), .26 | 94.49(8.90) |
| ab | Covar (Slopes) | 3.73(1.23), <.01 | 0.21(1.09), .85 | 0.36(2.06), .86 | 0.44(2.21), .84 | 1.18(1.70) |
| ab | Covar (Residuals) | -0.39(9.43), .97 | -1.25(10.27), .90 | -0.38(16.61), .98 | 0.44(16.60), .98 | -0.40(0.69) |
|  | Correlation of Levels | 0.186 | 0.2113 | 0.186 | 0.1907 | 0.19(0.01) |
|  | Correlation of Slopes | 0.671 | 0.0781 | 0.155 | 0.1912 | 0.27(0.27) |
|  | Correlation of Residuals | -0.002 | -0.0068 | -0.002 | 0.0024 | -0.00(0.00) |
|  | N | 563 | 150 | 150 | 150 | 253.25(206.50) |
|  | occasions | 9 | 8 | 8 | 8 | 8.25(0.50) |
|  | parameters | 25 | 29 | 41 | 45 | 35.00(9.52) |
|  | LL | -9,195 | -4,535 | -4,525 | -4,524 | -5,695(2,333) |
|  | AIC | 18,439 | 9,128 | 9,132 | 9,138 | 11,459(4,653) |
|  | BIC | 18,548 | 9,216 | 9,255 | 9,273 | 11,573(4,650) |

## digit\_tot

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | mean(sd) |
| a | Level | 317.52(14.43), <.01 | 312.29(21.04), <.01 | 335.31(24.64), <.01 | 347.88(25.15), <.01 | 328.25(16.38) |
| a | Slope | -12.73(3.31), <.01 | -9.96(5.25), .06 | -27.66(5.42), <.01 | -30.34(5.91), <.01 | -20.17(10.31) |
| a | Level \* age | -3.97(1.40), <.01 | -4.01(1.42), <.01 | -4.40(1.76), .01 | -4.47(1.77), .01 | -4.21(0.26) |
| a | Level \* education | --- | 0.90(2.26), .69 | -1.64(2.81), .56 | -2.20(2.86), .44 | -0.98(1.65) |
| a | Level \* height | --- | --- | 0.54(1.19), .65 | 0.46(1.23), .71 | 0.50(0.06) |
| a | Level \* smoking | --- | --- | --- | -0.64(15.29), .97 | -0.64(NA) |
| a | Level \* cardio | --- | --- | --- | -22.46(28.88), .44 | -22.46(NA) |
| a | Level \* diabetes | --- | --- | --- | -26.06(25.15), .30 | -26.06(NA) |
| a | Slope \* age | -0.30(0.36), .41 | -0.29(0.36), .42 | 0.28(0.42), .50 | 0.28(0.44), .53 | -0.01(0.33) |
| a | Slope \* education | --- | -0.46(0.62), .46 | 0.58(0.70), .41 | 0.74(0.72), .30 | 0.29(0.65) |
| a | Slope \* height | --- | --- | 0.56(0.30), .06 | 0.59(0.29), .04 | 0.58(0.02) |
| a | Slope \* smoking | --- | --- | --- | 1.97(2.98), .51 | 1.97(NA) |
| a | Slope \* cardio | --- | --- | --- | 3.51(9.70), .72 | 3.51(NA) |
| a | Slope \* diabetes | --- | --- | --- | -0.57(6.70), .93 | -0.57(NA) |
| b | Level | 13.52(0.30), <.01 | 11.20(0.41), <.01 | 13.40(0.88), <.01 | 13.64(0.96), <.01 | 12.94(1.17) |
| b | Slope | 0.25(0.07), <.01 | 0.36(0.11), <.01 | 0.20(0.18), .27 | 0.24(0.19), .19 | 0.26(0.07) |
| b | Level \* age | -0.04(0.03), .21 | -0.03(0.03), .28 | -0.07(0.06), .29 | -0.07(0.07), .30 | -0.05(0.02) |
| b | Level \* education | --- | 0.37(0.04), <.01 | 0.29(0.09), <.01 | 0.28(0.09), <.01 | 0.32(0.05) |
| b | Level \* height | --- | --- | 0.03(0.04), .56 | 0.03(0.04), .56 | 0.03(0.00) |
| b | Level \* smoking | --- | --- | --- | 0.41(0.52), .43 | 0.41(NA) |
| b | Level \* cardio | --- | --- | --- | -0.33(1.10), .76 | -0.33(NA) |
| b | Level \* diabetes | --- | --- | --- | -1.59(0.82), .05 | -1.59(NA) |
| b | Slope \* age | -0.01(0.01), .27 | -0.01(0.01), .26 | -0.01(0.01), .32 | -0.01(0.02), .34 | -0.01(0.00) |
| b | Slope \* education | --- | -0.02(0.01), .12 | -0.02(0.02), .41 | -0.02(0.02), .34 | -0.02(0.00) |
| b | Slope \* height | --- | --- | -0.01(0.01), .19 | -0.01(0.01), .17 | -0.01(0.00) |
| b | Slope \* smoking | --- | --- | --- | -0.02(0.12), .88 | -0.02(NA) |
| b | Slope \* cardio | --- | --- | --- | -0.11(0.36), .76 | -0.11(NA) |
| b | Slope \* diabetes | --- | --- | --- | 0.06(0.15), .70 | 0.06(NA) |
| a | Var (Level) | 5464.40(916.46), <.01 | 5443.31(927.60), <.01 | 4799.93(1076.88), <.01 | 4601.03(1104.55), <.01 | 5077.17(442.56) |
| a | Var (Slope) | 160.62(41.39), <.01 | 156.69(41.65), <.01 | 41.29(28.58), .15 | 32.13(28.48), .26 | 97.68(70.52) |
| a | Var (Residual) | 1625.55(61.70), <.01 | 1623.78(63.01), <.01 | 1700.25(104.06), <.01 | 1703.62(122.04), <.01 | 1663.30(44.64) |
| a | Covar (Level, Slope) | -565.27(163.30), <.01 | -552.12(169.75), <.01 | -302.37(132.32), .02 | -281.39(136.38), .04 | -425.29(154.38) |
| b | Var (Level) | 10.64(0.82), <.01 | 9.06(0.73), <.01 | 6.39(1.23), <.01 | 5.85(1.38), <.01 | 7.99(2.26) |
| b | Var (Slope) | 0.10(0.03), <.01 | 0.10(0.03), <.01 | 0.05(0.04), .16 | 0.05(0.04), .18 | 0.07(0.03) |
| b | Var (Residual) | 2.69(0.13), <.01 | 2.69(0.13), <.01 | 2.39(0.22), <.01 | 2.39(0.23), <.01 | 2.54(0.17) |
| b | Covar (Level, Slope) | -0.37(0.16), .02 | -0.30(0.14), .04 | 0.02(0.15), .89 | 0.03(0.16), .84 | -0.15(0.21) |
| ab | Covar (Levels) | 3.51(31.06), .91 | -1.14(29.85), .97 | -17.42(25.92), .50 | -24.44(27.64), .38 | -9.87(13.22) |
| ab | Covar (Slopes) | 1.22(1.07), .25 | 1.09(1.06), .30 | -0.75(0.90), .40 | -0.61(0.96), .53 | 0.24(1.06) |
| ab | Covar (Residuals) | 0.68(3.87), .86 | 0.61(3.87), .88 | 4.47(6.59), .50 | 3.65(7.29), .62 | 2.35(2.00) |
|  | Correlation of Levels | 0.015 | -0.0051 | -0.099 | -0.149 | -0.06(0.08) |
|  | Correlation of Slopes | 0.305 | 0.2791 | -0.513 | -0.483 | -0.10(0.46) |
|  | Correlation of Residuals | 0.010 | 0.0092 | 0.070 | 0.057 | 0.04(0.03) |
|  | N | 595 | 595 | 150 | 150 | 372.50(256.92) |
|  | occasions | 8 | 8 | 8 | 8 | 8.00(0.00) |
|  | parameters | 21 | 25 | 29 | 41 | 29.00(8.64) |
|  | LL | -7,635 | -7,596 | -3,870 | -3,859 | -5,740(2,166) |
|  | AIC | 15,312 | 15,241 | 7,797 | 7,800 | 11,538(4,317) |
|  | BIC | 15,404 | 15,351 | 7,884 | 7,924 | 11,641(4,315) |

## symbol

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full | mean(sd) |
| 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 | 320.98(18.44) |
| 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 | -17.88(8.80) |
| 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 | -4.13(0.17) |
| a | Level \* education | --- | 1.19(2.35), .61 | -1.15(2.70), .67 | -1.63(2.76), .56 | -1.61(2.76), .56 | -0.80(1.35) |
| a | Level \* height | --- | --- | 0.37(1.15), .75 | 0.26(1.21), .83 | 0.13(1.22), .91 | 0.25(0.12) |
| a | Level \* smoking | --- | --- | --- | -0.14(15.61), .99 | 0.00(15.99), .99 | -0.07(0.10) |
| a | Level \* cardio | --- | --- | --- | -23.26(31.20), .46 | -24.20(31.60), .44 | -23.73(0.66) |
| a | Level \* diabetes | --- | --- | --- | -22.93(25.83), .38 | -24.36(26.24), .35 | -23.64(1.01) |
| 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 | -0.06(0.24) |
| a | Slope \* education | --- | -0.42(0.73), .56 | 0.29(0.91), .75 | 0.38(0.94), .68 | 0.41(0.98), .68 | 0.16(0.39) |
| a | Slope \* height | --- | --- | 0.64(0.40), .11 | 0.68(0.41), .09 | 0.73(0.41), .08 | 0.68(0.04) |
| a | Slope \* smoking | --- | --- | --- | 1.74(4.92), .72 | 1.75(5.38), .74 | 1.74(0.01) |
| a | Slope \* cardio | --- | --- | --- | 3.28(12.12), .79 | 3.07(11.47), .79 | 3.17(0.15) |
| a | Slope \* diabetes | --- | --- | --- | -2.34(9.13), .80 | -2.07(9.40), .83 | -2.21(0.19) |
| 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 | 39.60(4.65) |
| 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 | 0.70(0.26) |
| 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 | -0.46(0.12) |
| b | Level \* education | --- | 2.02(0.17), <.01 | 1.89(0.35), <.01 | 1.79(0.36), <.01 | 1.79(0.38), <.01 | 1.87(0.11) |
| b | Level \* height | --- | --- | 0.08(0.18), .66 | 0.05(0.19), .78 | 0.05(0.19), .78 | 0.06(0.01) |
| b | Level \* smoking | --- | --- | --- | 2.19(1.95), .26 | 2.19(2.01), .27 | 2.19(0.00) |
| b | Level \* cardio | --- | --- | --- | -4.95(8.14), .54 | -4.96(8.15), .54 | -4.95(0.00) |
| b | Level \* diabetes | --- | --- | --- | -6.73(2.75), .01 | -6.75(2.82), .02 | -6.74(0.01) |
| 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 | -0.06(0.01) |
| b | Slope \* education | --- | -0.09(0.05), .06 | -0.06(0.07), .40 | -0.06(0.08), .44 | -0.06(0.09), .48 | -0.07(0.01) |
| b | Slope \* height | --- | --- | 0.00(0.03), .90 | 0.01(0.04), .89 | 0.00(0.04), .91 | 0.00(0.00) |
| b | Slope \* smoking | --- | --- | --- | 0.09(0.45), .83 | 0.09(0.48), .85 | 0.09(0.00) |
| b | Slope \* cardio | --- | --- | --- | 0.00(1.34), .99 | 0.00(1.37), .99 | 0.00(0.00) |
| b | Slope \* diabetes | --- | --- | --- | -0.26(0.52), .63 | -0.24(0.56), .66 | -0.25(0.01) |
| 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 | 5109.50(519.78) |
| 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 | 146.62(64.97) |
| 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 | 1613.24(45.92) |
| 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 | -505.08(179.88) |
| 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 | 137.58(31.83) |
| 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 | 0.84(0.66) |
| 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 | 29.61(1.36) |
| 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 | -3.34(2.11) |
| 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 | 273.15(61.59) |
| 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 | 6.46(4.83) |
| 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 | -1.24(1.70) |
|  | Correlation of Levels | 0.3305 | 0.3704 | 0.3319 | 0.2968 | 0.2914 | 0.32(0.03) |
|  | Correlation of Slopes | 0.7770 | 0.5831 | 0.5397 | 0.5048 | 0.3750 | 0.56(0.15) |
|  | Correlation of Residuals | -0.0085 | 0.0084 | -0.0094 | -0.0089 | -0.0096 | -0.01(0.01) |
|  | N | 592 | 592 | 150 | 150 | 150 | 326.80(242.09) |
|  | occasions | 9 | 7 | 6 | 6 | 6 | 6.80(1.30) |
|  | parameters | 21 | 25 | 29 | 41 | 45 | 32.20(10.35) |
|  | LL | -10,104 | -9,446 | -4,340 | -4,327 | -4,326 | -6,509(2,991) |
|  | AIC | 20,249 | 18,943 | 8,738 | 8,735 | 8,742 | 13,081(5,965) |
|  | BIC | 20,341 | 19,052 | 8,826 | 8,859 | 8,878 | 13,191(5,956) |

## trailsb

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full | mean(sd) |
| 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 | 329.66(12.92) |
| 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 | -21.27(7.92) |
| 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 | -4.37(0.17) |
| a | Level \* education | --- | 1.07(2.21), .63 | -1.56(2.65), .56 | -2.10(2.56), .41 | -2.06(2.57), .42 | -1.16(1.51) |
| a | Level \* height | --- | --- | 0.60(1.18), .61 | 0.48(1.22), .69 | 0.35(1.24), .78 | 0.48(0.13) |
| a | Level \* smoking | --- | --- | --- | -0.34(15.66), .98 | -0.14(16.04), .99 | -0.24(0.14) |
| a | Level \* cardio | --- | --- | --- | -21.55(29.27), .46 | -22.83(30.59), .46 | -22.19(0.91) |
| a | Level \* diabetes | --- | --- | --- | -26.56(24.53), .28 | -28.03(25.56), .27 | -27.30(1.04) |
| 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 | 0.03(0.16) |
| a | Slope \* education | --- | -0.54(0.58), .35 | 0.54(0.70), .44 | 0.68(0.74), .36 | 0.70(0.75), .35 | 0.34(0.60) |
| a | Slope \* height | --- | --- | 0.51(0.27), .05 | 0.57(0.27), .04 | 0.61(0.28), .03 | 0.57(0.05) |
| a | Slope \* smoking | --- | --- | --- | 1.89(3.69), .61 | 1.88(4.02), .64 | 1.88(0.00) |
| a | Slope \* cardio | --- | --- | --- | 2.45(9.40), .79 | 2.44(9.21), .79 | 2.44(0.01) |
| a | Slope \* diabetes | --- | --- | --- | -0.31(8.60), .97 | -0.06(9.22), .99 | -0.19(0.18) |
| 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 | 161.42(20.57) |
| 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 | 1.66(1.49) |
| 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 | 2.06(0.35) |
| b | Level \* education | --- | -7.73(0.90), <.01 | -7.82(2.03), <.01 | -7.22(2.22), <.01 | -7.32(2.27), <.01 | -7.52(0.30) |
| b | Level \* height | --- | --- | -0.04(0.78), .96 | 0.10(0.88), .91 | 0.27(0.92), .76 | 0.11(0.16) |
| b | Level \* smoking | --- | --- | --- | -11.54(10.43), .27 | -11.97(9.91), .23 | -11.76(0.31) |
| b | Level \* cardio | --- | --- | --- | 26.85(19.19), .16 | 29.70(21.00), .16 | 28.28(2.01) |
| b | Level \* diabetes | --- | --- | --- | 31.07(16.68), .06 | 33.33(17.81), .06 | 32.20(1.60) |
| 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 | 0.24(0.05) |
| b | Slope \* education | --- | 0.20(0.21), .33 | -0.05(0.57), .93 | -0.11(0.62), .86 | -0.11(0.61), .86 | -0.02(0.15) |
| b | Slope \* height | --- | --- | 0.02(0.18), .89 | -0.00(0.21), .98 | -0.01(0.22), .97 | 0.00(0.02) |
| b | Slope \* smoking | --- | --- | --- | -0.32(2.73), .91 | -0.31(2.98), .92 | -0.32(0.00) |
| b | Slope \* cardio | --- | --- | --- | -1.92(6.48), .77 | -2.00(6.44), .76 | -1.96(0.06) |
| b | Slope \* diabetes | --- | --- | --- | 2.62(4.55), .56 | 2.66(5.06), .60 | 2.64(0.02) |
| 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 | 5005.60(436.75) |
| 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 | 76.55(46.76) |
| 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 | 1686.43(5.06) |
| 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 | -389.40(106.46) |
| 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 | 2685.67(444.09) |
| 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 | 6.68(0.81) |
| 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 | 1581.83(144.43) |
| 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 | 43.70(6.57) |
| 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 | -1053.05(313.21) |
| 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 | -5.60(5.55) |
| 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 | -41.69(52.21) |
|  | Correlation of Levels | -0.33 | -0.3413 | -0.277 | -0.237 | -0.226 | -0.28(0.05) |
|  | Correlation of Slopes | -0.39 | -0.3667 | -0.231 | -0.036 | -0.016 | -0.21(0.18) |
|  | Correlation of Residuals | 0.01 | 0.0079 | -0.051 | -0.049 | -0.051 | -0.03(0.03) |
|  | N | 580 | 580 | 150 | 150 | 150 | 322.00(235.52) |
|  | occasions | 9 | 9 | 8 | 8 | 8 | 8.40(0.55) |
|  | parameters | 21 | 25 | 29 | 41 | 45 | 32.20(10.35) |
|  | LL | -13,187 | -13,142 | -5,891 | -5,878 | -5,875 | -8,794(3,989) |
|  | AIC | 26,416 | 26,333 | 11,840 | 11,838 | 11,840 | 17,653(7,961) |
|  | BIC | 26,507 | 26,442 | 11,928 | 11,961 | 11,975 | 17,763(7,953) |

## Summary

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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 |

# 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 | mean(sd) |
| a | Level | 468.26(40.46), <.01 | 412.91(49.38), <.01 | 454.50(91.23), <.01 | 445.22(28.82) |
| a | Slope | -18.94(8.62), .03 | -29.25(10.46), <.01 | -34.23(25.43), .18 | -27.47(7.80) |
| a | Level \* age | -4.66(2.91), .11 | -5.16(3.10), .10 | -6.21(6.66), .35 | -5.35(0.79) |
| a | Level \* education | 0.38(4.09), .93 | 5.99(4.49), .18 | 5.33(7.87), .50 | 3.90(3.07) |
| a | Level \* height | --- | 3.87(2.76), .16 | 3.87(4.10), .34 | 3.87(0.00) |
| a | Level \* smoking | --- | --- | -31.74(72.57), .66 | -31.74(NA) |
| a | Level \* cardio | --- | --- | -21.55(74.63), .77 | -21.55(NA) |
| a | Level \* diabetes | --- | --- | -15.64(64.89), .81 | -15.64(NA) |
| a | Slope \* age | -0.19(0.61), .76 | 0.61(0.79), .44 | 1.02(1.85), .58 | 0.48(0.61) |
| a | Slope \* education | -0.02(1.00), .98 | 0.36(1.10), .74 | 0.22(1.88), .91 | 0.19(0.19) |
| a | Slope \* height | --- | -0.64(1.35), .63 | -0.59(1.37), .67 | -0.62(0.04) |
| a | Slope \* smoking | --- | --- | 4.51(14.59), .76 | 4.51(NA) |
| a | Slope \* cardio | --- | --- | -4.70(20.59), .82 | -4.70(NA) |
| a | Slope \* diabetes | --- | --- | -0.58(21.59), .98 | -0.58(NA) |
| b | Level | 20.52(1.03), <.01 | 19.31(3.81), <.01 | 24.22(7.97), <.01 | 21.35(2.56) |
| b | Slope | 0.90(0.26), <.01 | 1.57(1.53), .31 | 1.40(1.75), .42 | 1.29(0.34) |
| b | Level \* age | -0.02(0.11), .88 | 0.31(0.35), .38 | 0.25(0.45), .58 | 0.18(0.17) |
| b | Level \* education | 0.01(0.03), .86 | 0.73(0.30), .02 | 0.58(0.53), .28 | 0.44(0.38) |
| b | Level \* height | --- | 0.01(0.28), .97 | 0.04(0.19), .85 | 0.02(0.02) |
| b | Level \* smoking | --- | --- | -3.94(3.47), .26 | -3.94(NA) |
| b | Level \* cardio | --- | --- | 0.32(3.77), .93 | 0.32(NA) |
| b | Level \* diabetes | --- | --- | -3.76(5.25), .47 | -3.76(NA) |
| b | Slope \* age | -0.05(0.02), <.01 | -0.08(0.17), .62 | -0.08(0.10), .39 | -0.07(0.02) |
| b | Slope \* education | -0.00(0.03), .97 | -0.10(0.12), .42 | -0.09(0.11), .44 | -0.06(0.05) |
| b | Slope \* height | --- | -0.04(0.14), .81 | -0.03(0.04), .48 | -0.03(0.00) |
| b | Slope \* smoking | --- | --- | 0.25(0.78), .75 | 0.25(NA) |
| b | Slope \* cardio | --- | --- | 0.22(1.57), .89 | 0.22(NA) |
| b | Slope \* diabetes | --- | --- | -0.42(1.22), .73 | -0.42(NA) |
| a | Var (Level) | 12369.76(3034.59), <.01 | 12541.22(3161.93), <.01 | 12688.87(6239.69), .04 | 12533.28(159.70) |
| a | Var (Slope) | 207.90(118.40), .08 | 204.82(213.03), .34 | 203.28(383.57), .60 | 205.33(2.35) |
| a | Var (Residual) | 4750.71(840.79), <.01 | 4397.04(1166.62), <.01 | 4549.81(797.42), <.01 | 4565.85(177.38) |
| a | Covar (Level, Slope) | -767.90(619.22), .21 | -776.24(651.36), .23 | -903.63(1259.50), .47 | -815.92(76.07) |
| b | Var (Level) | 76.62(7.95), <.01 | 46.25(13.11), <.01 | 42.09(20.26), .04 | 54.98(18.85) |
| b | Var (Slope) | 0.15(0.15), .31 | 0.03(7.94), .99 | 0.02(0.57), .97 | 0.07(0.07) |
| b | Var (Residual) | 22.19(1.50), <.01 | 23.78(9.55), .01 | 23.73(3.04), <.01 | 23.24(0.91) |
| b | Covar (Level, Slope) | -2.12(1.19), .07 | 0.01(12.80), .99 | -0.60(3.19), .85 | -0.90(1.10) |
| ab | Covar (Levels) | -122.43(137.12), .37 | -89.80(125.58), .47 | -165.36(340.93), .63 | -125.86(37.90) |
| ab | Covar (Slopes) | -0.17(3.37), .96 | -0.13(18.94), .99 | -1.10(15.01), .94 | -0.47(0.55) |
| ab | Covar (Residuals) | 7.05(22.67), .76 | 28.00(36.76), .45 | 31.73(63.31), .62 | 22.26(13.30) |
|  | Correlation of Levels | -0.126 | -0.118 | -0.226 | -0.16(0.06) |
|  | Correlation of Slopes | -0.031 | -0.052 | -0.499 | -0.19(0.26) |
|  | Correlation of Residuals | 0.022 | 0.087 | 0.097 | 0.07(0.04) |
|  | N | 350 | 72 | 72 | 164.67(160.50) |
|  | occasions | 9 | 8 | 8 | 8.33(0.58) |
|  | parameters | 25 | 29 | 41 | 31.67(8.33) |
|  | LL | -5,823 | -2,542 | -2,534 | -3,633(1,897) |
|  | AIC | 11,697 | 5,143 | 5,150 | 7,330(3,782) |
|  | BIC | 11,793 | 5,209 | 5,243 | 7,415(3,792) |

## digit\_tot

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full | mean(sd) |
| 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 | 447.10(24.27) |
| 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 | -26.73(12.16) |
| 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 | -4.32(0.70) |
| a | Level \* education | --- | 2.45(5.00), .62 | 4.90(7.21), .50 | 3.70(9.13), .69 | 3.62(9.86), .71 | 3.67(1.00) |
| a | Level \* height | --- | --- | 3.31(3.02), .27 | 3.40(3.53), .34 | 3.48(4.64), .45 | 3.39(0.08) |
| a | Level \* smoking | --- | --- | --- | -33.65(62.68), .59 | -42.30(110.78), .70 | -37.98(6.12) |
| a | Level \* cardio | --- | --- | --- | -36.52(82.98), .66 | -30.08(93.01), .75 | -33.30(4.55) |
| a | Level \* diabetes | --- | --- | --- | -9.25(63.29), .88 | -1.12(61.35), .98 | -5.19(5.75) |
| 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 | 0.02(0.53) |
| a | Slope \* education | --- | -0.39(1.08), .72 | 0.98(1.57), .53 | 1.16(2.05), .57 | 1.15(2.42), .64 | 0.72(0.74) |
| a | Slope \* height | --- | --- | -0.19(0.98), .85 | -0.18(1.28), .89 | -0.20(2.08), .92 | -0.19(0.01) |
| a | Slope \* smoking | --- | --- | --- | 5.57(20.05), .78 | 5.88(23.22), .80 | 5.72(0.22) |
| a | Slope \* cardio | --- | --- | --- | 9.19(19.07), .63 | 9.02(23.38), .70 | 9.10(0.12) |
| a | Slope \* diabetes | --- | --- | --- | -3.26(17.68), .85 | -3.37(20.12), .87 | -3.32(0.08) |
| 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 | 13.64(0.44) |
| 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 | -0.08(0.25) |
| 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 | -0.04(0.01) |
| b | Level \* education | --- | 0.00(0.01), .98 | 0.29(0.19), .13 | 0.34(0.24), .16 | 0.33(0.26), .20 | 0.24(0.16) |
| b | Level \* height | --- | --- | -0.15(0.07), .03 | -0.14(0.08), .07 | -0.12(0.09), .15 | -0.14(0.01) |
| b | Level \* smoking | --- | --- | --- | 1.22(1.74), .48 | 0.91(1.95), .64 | 1.06(0.22) |
| b | Level \* cardio | --- | --- | --- | 0.50(1.64), .76 | 0.66(1.78), .71 | 0.58(0.11) |
| b | Level \* diabetes | --- | --- | --- | -1.15(1.71), .50 | -0.82(1.92), .67 | -0.99(0.23) |
| 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 | 0.01(0.01) |
| b | Slope \* education | --- | 0.00(0.01), .70 | 0.01(0.03), .84 | -0.00(0.04), .95 | 0.00(0.05), .98 | 0.00(0.00) |
| b | Slope \* height | --- | --- | 0.01(0.01), .40 | 0.01(0.02), .66 | 0.00(0.02), .91 | 0.01(0.00) |
| b | Slope \* smoking | --- | --- | --- | -0.16(0.33), .63 | -0.09(0.38), .81 | -0.13(0.05) |
| b | Slope \* cardio | --- | --- | --- | 0.03(0.61), .96 | 0.03(0.64), .96 | 0.03(0.00) |
| b | Slope \* diabetes | --- | --- | --- | -0.02(0.49), .97 | -0.10(0.58), .86 | -0.06(0.06) |
| 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 | 12609.11(89.67) |
| 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 | 336.58(46.84) |
| 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 | 4428.29(385.66) |
| 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 | -976.99(27.15) |
| 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 | 11.40(1.01) |
| 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 | 0.05(0.03) |
| 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 | 2.76(0.31) |
| 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 | -0.47(0.12) |
| 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 | -82.49(12.40) |
| 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 | -3.33(1.54) |
| 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 | 19.27(2.33) |
|  | Correlation of Levels | -0.18 | -0.20 | -0.28 | -0.21 | -0.23 | -0.22(0.04) |
|  | Correlation of Slopes | -0.67 | -0.66 | -0.81 | -0.91 | -0.94 | -0.80(0.13) |
|  | Correlation of Residuals | 0.14 | 0.14 | 0.21 | 0.20 | 0.20 | 0.18(0.04) |
|  | N | 379 | 379 | 72 | 72 | 72 | 194.80(168.15) |
|  | occasions | 8 | 8 | 7 | 8 | 8 | 7.80(0.45) |
|  | parameters | 21 | 25 | 29 | 41 | 45 | 32.20(10.35) |
|  | LL | -4,878 | -4,877 | -2,147 | -2,177 | -2,175 | -3,251(1,485) |
|  | AIC | 9,798 | 9,805 | 4,352 | 4,436 | 4,439 | 6,566(2,954) |
|  | BIC | 9,881 | 9,903 | 4,418 | 4,529 | 4,542 | 6,655(2,956) |

## symbol

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| process | label | a | ae | aeh | aehplus | full | mean(sd) |
| 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 | 440.88(21.00) |
| 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 | -21.68(7.22) |
| 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 | -4.87(0.37) |
| a | Level \* education | --- | 0.40(5.41), .94 | 6.08(6.40), .34 | 5.17(8.03), .52 | 5.15(10.03), .61 | 4.20(2.57) |
| a | Level \* height | --- | --- | 3.20(2.81), .25 | 3.32(3.36), .32 | 3.20(3.90), .41 | 3.24(0.07) |
| a | Level \* smoking | --- | --- | --- | -26.75(70.38), .70 | -35.26(87.59), .69 | -31.01(6.01) |
| a | Level \* cardio | --- | --- | --- | -21.97(84.30), .79 | -14.15(84.51), .87 | -18.06(5.53) |
| a | Level \* diabetes | --- | --- | --- | -19.72(50.23), .69 | -12.34(59.41), .83 | -16.03(5.22) |
| 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 | 0.10(0.39) |
| a | Slope \* education | --- | 0.05(1.41), .97 | 0.22(2.00), .91 | 0.22(2.31), .92 | 0.17(2.46), .94 | 0.17(0.08) |
| a | Slope \* height | --- | --- | -0.20(1.07), .85 | -0.21(1.41), .88 | -0.11(1.59), .95 | -0.17(0.06) |
| a | Slope \* smoking | --- | --- | --- | 2.17(20.00), .91 | 2.26(22.21), .92 | 2.21(0.06) |
| a | Slope \* cardio | --- | --- | --- | -3.33(43.32), .94 | -4.20(47.52), .93 | -3.76(0.62) |
| a | Slope \* diabetes | --- | --- | --- | 0.88(19.25), .96 | 1.49(26.15), .95 | 1.18(0.43) |
| 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 | 39.73(1.01) |
| 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 | 0.63(0.25) |
| 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 | -0.23(0.05) |
| b | Level \* education | --- | -0.02(0.08), .83 | 1.27(0.58), .03 | 1.24(0.67), .06 | 1.25(0.74), .09 | 0.94(0.64) |
| b | Level \* height | --- | --- | 0.09(0.25), .73 | 0.09(0.26), .73 | 0.09(0.26), .73 | 0.09(0.00) |
| b | Level \* smoking | --- | --- | --- | -0.04(4.74), .99 | 0.13(5.51), .98 | 0.04(0.12) |
| b | Level \* cardio | --- | --- | --- | -4.36(5.62), .44 | -4.51(6.34), .48 | -4.44(0.10) |
| b | Level \* diabetes | --- | --- | --- | -4.04(4.60), .38 | -4.21(4.69), .37 | -4.12(0.12) |
| 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 | -0.04(0.03) |
| b | Slope \* education | --- | 0.01(0.08), .91 | -0.14(0.16), .39 | -0.14(0.19), .48 | -0.14(0.20), .50 | -0.10(0.07) |
| b | Slope \* height | --- | --- | 0.01(0.06), .84 | 0.01(0.07), .85 | 0.01(0.08), .86 | 0.01(0.00) |
| b | Slope \* smoking | --- | --- | --- | 0.10(0.95), .91 | 0.09(1.10), .94 | 0.10(0.01) |
| b | Slope \* cardio | --- | --- | --- | 0.40(1.65), .81 | 0.42(1.71), .81 | 0.41(0.01) |
| b | Slope \* diabetes | --- | --- | --- | 0.13(1.26), .92 | 0.14(1.32), .91 | 0.14(0.01) |
| 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 | 11252.61(887.21) |
| 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 | 178.76(45.11) |
| 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 | 4846.08(468.89) |
| 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 | -538.90(237.99) |
| 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 | 103.76(44.09) |
| 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 | 1.82(0.23) |
| 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 | 26.00(2.40) |
| 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 | -1.35(1.57) |
| 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 | 91.84(126.64) |
| 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 | -0.38(7.24) |
| 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 | 14.26(5.33) |
|  | Correlation of Levels | 0.144 | 0.195 | 0.024 | -0.0098 | -0.013 | 0.07(0.10) |
|  | Correlation of Slopes | 0.118 | 0.538 | -0.327 | -0.3075 | -0.288 | -0.05(0.38) |
|  | Correlation of Residuals | 0.039 | 0.013 | 0.054 | 0.0518 | 0.050 | 0.04(0.02) |
|  | N | 377 | 377 | 72 | 72 | 72 | 194.00(167.06) |
|  | occasions | 9 | 5 | 6 | 6 | 6 | 6.40(1.52) |
|  | parameters | 21 | 25 | 29 | 41 | 45 | 32.20(10.35) |
|  | LL | -6,302 | -5,301 | -2,420 | -2,417 | -2,416 | -3,771(1,887) |
|  | AIC | 12,646 | 10,651 | 4,898 | 4,916 | 4,922 | 7,606(3,757) |
|  | BIC | 12,728 | 10,750 | 4,964 | 5,009 | 5,024 | 7,695(3,757) |

## trailsb

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| process | label | ae | aeh | aehplus | full | mean(sd) |
| a | Level | 449.46(48.72), <.01 | 413.57(61.67), <.01 | 445.39(93.94), <.01 | 467.80(151.55), <.01 | 444.06(22.54) |
| a | Slope | -16.65(13.61), .22 | -29.16(30.96), .35 | -29.81(37.75), .43 | -29.38(50.40), .56 | -26.25(6.41) |
| a | Level \* age | -4.54(3.23), .16 | -4.87(5.25), .35 | -5.22(7.35), .48 | -5.54(8.93), .54 | -5.04(0.43) |
| a | Level \* education | 1.16(5.44), .83 | 5.80(6.35), .36 | 4.82(7.49), .52 | 4.81(8.00), .55 | 4.15(2.04) |
| a | Level \* height | --- | 3.09(3.19), .33 | 3.20(3.94), .42 | 3.10(4.75), .52 | 3.13(0.06) |
| a | Level \* smoking | --- | --- | -26.71(70.41), .70 | -35.41(103.71), .73 | -31.06(6.15) |
| a | Level \* cardio | --- | --- | -25.84(69.97), .71 | -18.28(77.44), .81 | -22.06(5.35) |
| a | Level \* diabetes | --- | --- | -7.57(64.27), .91 | 0.61(77.01), .99 | -3.48(5.79) |
| a | Slope \* age | -0.19(0.88), .83 | 0.43(2.02), .83 | 0.46(2.64), .86 | 0.44(3.12), .89 | 0.28(0.32) |
| a | Slope \* education | -0.01(1.19), .99 | 0.40(1.97), .84 | 0.42(2.26), .85 | 0.38(2.20), .86 | 0.30(0.20) |
| a | Slope \* height | --- | -0.12(1.03), .91 | -0.16(1.33), .90 | -0.07(1.61), .97 | -0.12(0.05) |
| a | Slope \* smoking | --- | --- | 3.04(20.89), .88 | 3.21(24.96), .90 | 3.13(0.11) |
| a | Slope \* cardio | --- | --- | -0.54(23.74), .98 | -1.17(24.21), .96 | -0.85(0.45) |
| a | Slope \* diabetes | --- | --- | -5.23(22.14), .81 | -5.08(33.70), .88 | -5.15(0.11) |
| b | Level | 131.50(9.85), <.01 | 159.64(30.56), <.01 | 153.89(58.29), .01 | 160.29(70.48), .02 | 151.33(13.53) |
| b | Slope | 2.26(3.10), .47 | -0.02(9.19), .99 | 3.49(13.75), .80 | 2.94(17.25), .86 | 2.17(1.54) |
| b | Level \* age | 1.90(0.82), .02 | 1.11(2.27), .62 | 1.17(2.71), .66 | 1.09(3.22), .74 | 1.32(0.39) |
| b | Level \* education | 0.29(0.37), .43 | -6.50(3.32), .05 | -6.30(4.34), .15 | -6.31(5.10), .22 | -4.71(3.33) |
| b | Level \* height | --- | -0.66(1.39), .64 | -0.53(1.70), .76 | -0.57(2.04), .78 | -0.58(0.06) |
| b | Level \* smoking | --- | --- | -0.57(37.27), .99 | -3.09(45.38), .95 | -1.83(1.78) |
| b | Level \* cardio | --- | --- | 21.94(28.88), .45 | 24.23(34.58), .48 | 23.09(1.62) |
| b | Level \* diabetes | --- | --- | 1.35(20.85), .95 | 3.59(25.26), .89 | 2.47(1.58) |
| b | Slope \* age | 0.14(0.20), .49 | 0.19(0.57), .74 | 0.10(0.66), .88 | 0.10(0.74), .89 | 0.13(0.04) |
| b | Slope \* education | -0.18(0.34), .60 | 0.30(0.82), .71 | 0.17(0.97), .86 | 0.17(1.08), .88 | 0.12(0.21) |
| b | Slope \* height | --- | 0.42(0.32), .19 | 0.36(0.42), .40 | 0.38(0.48), .43 | 0.39(0.03) |
| b | Slope \* smoking | --- | --- | -2.20(9.45), .81 | -1.94(11.21), .86 | -2.07(0.18) |
| b | Slope \* cardio | --- | --- | -8.71(9.83), .38 | -9.06(11.69), .44 | -8.88(0.25) |
| b | Slope \* diabetes | --- | --- | 4.88(6.45), .45 | 4.74(7.00), .50 | 4.81(0.10) |
| a | Var (Level) | 12270.35(3595.63), <.01 | 12393.75(4933.39), .01 | 11883.57(5402.90), .03 | 11597.20(5921.83), .05 | 12036.22(364.55) |
| a | Var (Slope) | 203.13(111.33), .07 | 244.43(352.12), .49 | 225.26(476.59), .64 | 226.60(632.86), .72 | 224.86(16.92) |
| a | Var (Residual) | 4774.16(348.56), <.01 | 4309.09(496.84), <.01 | 4299.90(600.71), <.01 | 4301.06(654.03), <.01 | 4421.05(235.44) |
| a | Covar (Level, Slope) | -760.94(503.61), .13 | -812.64(1069.79), .45 | -705.04(1369.29), .61 | -695.74(1812.17), .70 | -743.59(54.30) |
| b | Var (Level) | 3968.80(636.03), <.01 | 1632.33(733.60), .03 | 1543.36(843.99), .07 | 1526.70(862.93), .08 | 2167.80(1201.57) |
| b | Var (Slope) | 35.32(14.12), .01 | 34.69(29.95), .25 | 13.59(33.43), .68 | 13.39(37.07), .72 | 24.25(12.42) |
| b | Var (Residual) | 1554.35(56.69), <.01 | 1652.60(158.73), <.01 | 1673.38(173.16), <.01 | 1674.38(205.62), <.01 | 1638.68(57.11) |
| b | Covar (Level, Slope) | -147.56(91.75), .11 | -106.16(171.63), .54 | -68.12(197.81), .73 | -67.38(195.07), .73 | -97.30(38.08) |
| ab | Covar (Levels) | -9.52(1556.25), .99 | 956.14(1283.00), .46 | 1194.13(1879.70), .52 | 1129.70(2255.92), .62 | 817.62(560.51) |
| ab | Covar (Slopes) | 20.77(31.42), .51 | 11.70(68.11), .86 | 19.54(145.95), .89 | 20.02(163.04), .90 | 18.01(4.23) |
| ab | Covar (Residuals) | 4.79(289.00), .99 | -267.66(634.01), .67 | -279.10(856.01), .74 | -284.29(1021.38), .78 | -206.56(141.08) |
|  | Correlation of Levels | -0.0014 | 0.21 | 0.28 | 0.27 | 0.19(0.13) |
|  | Correlation of Slopes | 0.2452 | 0.13 | 0.35 | 0.36 | 0.27(0.11) |
|  | Correlation of Residuals | 0.0018 | -0.10 | -0.10 | -0.11 | -0.08(0.05) |
|  | N | 368 | 72 | 72 | 72 | 146.00(148.00) |
|  | occasions | 9 | 8 | 8 | 8 | 8.25(0.50) |
|  | parameters | 25 | 29 | 41 | 45 | 35.00(9.52) |
|  | LL | -8,270 | -3,279 | -3,272 | -3,271 | -4,523(2,498) |
|  | AIC | 16,590 | 6,616 | 6,625 | 6,631 | 9,116(4,983) |
|  | BIC | 16,688 | 6,682 | 6,719 | 6,734 | 9,205(4,988) |

## Summary

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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 |

#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] ggplot2\_2.1.0 knitr\_1.14 magrittr\_1.5   
  
loaded via a namespace (and not attached):  
 [1] Rcpp\_0.12.7 munsell\_0.4.3 testit\_0.5 colorspace\_1.2-6 R6\_2.1.3 highr\_0.6   
 [7] plyr\_1.8.4 stringr\_1.1.0 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 readr\_1.0.0 formatR\_1.4 tidyr\_0.6.0 htmlwidgets\_0.7   
[25] rsconnect\_0.4.3 evaluate\_0.9 rmarkdown\_1.0 stringi\_1.1.1 scales\_0.4.0