

EAS : Seed report

Date: 2016-11-07

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

bnt

2

pef

categories

2

pef

digit_tot

8

pef

fas

2

pef

logic_tot

2

pef

mmse

2

pef

symbol

10

pef

trailsb
8
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

ah

pef

block

1

eas

female

ah

pef

digit_tot

1

eas

female

ah

pef

symbol

1

eas

female

ah

pef

trailsb

1

eas

female

achplus

pef

block

1

eas

female

achplus

pef

bnt

1

eas

female

achplus

pef

categories

1

eas

female

achplus

pef

digit_tot

1

eas

female

achplus

pef

fas

1

eas

female

achplus

pef

logic_tot

1

eas

female

aeplus

pef

mmse

1

eas

female

aeplus

pef

symbol

1

eas

female

aeplus

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

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

aeplus

pef

block

1

eas

male

achplus

pef

bnt

1

eas

male

achplus

pef

categories

1

eas

male

achplus

pef

fas

1

eas

male

achplus

pef

logic_tot

1

eas

male

achplus

pef

mmse

1

eas

male

achplus

pef

symbol
 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: *achplus*; Process (a) = *pef*; Process (b): *block, bnt, categories, digit_tot, fas, logic_tot, mmse, symbol, trailsb*

process
 label
 block
 bnt
 categories
 digit_tot
 fas
 logic_tot
 mmse
 symbol
 trailsb
 mean(sd)

ab
Covar (Levels)
90.07 (75.15) .23
38.07 (22.34) .09
82.62 (74.98) .27
-28.45 (25.50) .26
29.54 (106.47) .78
81.32 (54.69) .14
20.91 (12.09) .08
201.39 (111.31) .07
-818.94 (707.87) .25

ab
Covar (Slopes)
-0.30 (2.64) .91
-0.45 (1.15) .69
-1.22 (3.96) .76
-0.76 (1.13) .50
-2.18 (3.08) .48
0.53 (2.48) .83
0.11 (0.49) .82
1.93 (2.81) .49
-5.32 (37.39) .89

ab
Covar (Residuals)
3.98 (17.73) .82
1.66 (7.29) .82
-9.54 (13.85) .49
4.25 (7.08) .55
1.28 (24.00) .96
17.14 (16.31) .29
-0.07 (3.23) .98
2.81 (22.77) .90
-68.68 (221.61) .76

er

Corr (Levels)

0.19 (0.15) .21

0.33 (0.18) .07

0.16 (0.14) .25

-0.17 (0.15) .25

0.04 (0.15) .78

0.25 (0.16) .12

0.31 (0.16) .05

0.28 (0.14) .04

-0.25 (0.20) .20

—

er

Corr (Slopes)

-0.11 (1.02) .91

-0.31 (0.74) .68

-0.16 (0.54) .76

-0.42 (0.60) .48

-0.52 (0.84) .54

0.20 (0.94) .83

0.28 (1.27) .83

0.51 (0.92) .58

-0.23 (1.59) .89

—

er

Corr (Residuals)

0.02 (0.10) .82

0.03 (0.14) .82

-0.06 (0.09) .49

0.07 (0.11) .55

0.01 (0.12) .96

0.11 (0.10) .29

-0.00 (0.11) .98

0.01 (0.10) .90

-0.04 (0.14) .76

—

a

Level

342.20 (26.25) <.01

341.34 (26.84) <.01

343.84 (25.16) <.01

343.60 (25.89) <.01

343.58 (24.89) <.01

341.08 (25.69) <.01

342.91 (27.58) <.01

342.45 (25.32) <.01

340.94 (26.56) <.01

342.44(1.13)

a

Slope

-27.18 (7.83) <.01

-26.24 (7.22) <.01

-28.00 (7.73) <.01

-28.01 (7.20) <.01

-28.26 (7.60) <.01

-26.25 (7.30) <.01

-27.53 (8.51) <.01

-27.33 (6.77) <.01

-26.21 (7.99) <.01

-27.22(0.82)

a

Level * age

-4.25 (1.85) .02

-4.28 (1.90) .02

-4.29 (1.84) .02

-4.33 (1.86) .02

-4.27 (1.92) .03

-4.25 (1.81) .02

-4.29 (1.87) .02

-4.23 (1.80) .02

-4.19 (2.02) .04

-4.27(0.04)

a

Level * education

-1.87 (2.75) .50

-1.81 (2.92) .54

-2.00 (2.77) .47

-1.84 (2.93) .53

-1.82 (2.71) .50

-1.77 (2.82) .53

-1.87 (2.76) .50

-1.85 (2.72) .50

-1.72 (2.70) .52

-1.84(0.08)

a

Level * height

0.37 (1.31) .78

0.41 (1.30) .75

0.39 (1.24) .75

0.42 (1.26) .73

0.42 (1.33) .76

0.40 (1.20) .74

0.40 (1.20) .73

0.42 (1.22) .73

0.46 (1.27) .72

0.41(0.02)

a

Level * smoking

-0.48 (13.03) .97

-0.02 (17.75) .99

-0.81 (14.50) .95

-0.66 (15.24) .96

-0.92 (16.73) .96

-0.50 (13.62) .97

-0.48 (13.74) .97

-0.39 (15.10) .98

-0.21 (15.50) .99

-0.50(0.28)

a

Level * cardio

-22.81 (36.56) .53
-20.09 (27.01) .46
-23.40 (25.18) .35
-23.32 (29.17) .42
-22.96 (25.21) .36
-20.77 (33.81) .54
-22.51 (24.46) .36
-22.98 (28.80) .42
-23.02 (29.25) .43
-22.43(1.18)

a

Level * diabetes

-25.83 (26.42) .33
-27.08 (25.93) .30
-26.05 (26.77) .33
-25.87 (26.09) .32
-25.73 (26.01) .32
-25.45 (28.04) .36
-25.80 (27.88) .35
-25.69 (25.50) .31
-26.52 (24.59) .28
-26.00(0.50)

a

Slope * age

0.15 (0.50) .76
0.16 (0.51) .75
0.19 (0.51) .71
0.22 (0.52) .68
0.18 (0.54) .73
0.15 (0.53) .78
0.15 (0.50) .77
0.15 (0.53) .78
0.11 (0.66) .87
0.16(0.03)

a

Slope * education

0.56 (0.85) .51

0.49 (0.86) .57

0.61 (0.90) .50

0.52 (0.84) .54

0.52 (0.81) .52

0.48 (0.90) .59

0.57 (0.96) .55

0.54 (0.81) .50

0.45 (0.90) .62

0.53(0.05)

a

Slope * height

0.63 (0.29) .03

0.62 (0.30) .04

0.63 (0.31) .05

0.60 (0.35) .09

0.62 (0.31) .04

0.61 (0.29) .03

0.61 (0.31) .05

0.61 (0.32) .05

0.57 (0.34) .10

0.61(0.02)

a

Slope * smoking

1.86 (3.28) .57

1.61 (4.82) .74

2.05 (3.42) .55

1.95 (3.42) .57

2.19 (3.87) .57

1.77 (3.35) .60

1.90 (3.18) .55

1.89 (3.69) .61

1.77 (4.27) .68

1.89(0.17)

a

Slope * cardio

3.10 (10.80) .77

1.03 (9.56) .91

3.72 (8.39) .66

3.89 (9.43) .68

3.28 (8.14) .69

1.94 (13.93) .89

3.48 (10.03) .73

3.40 (10.31) .74

3.38 (9.52) .72

3.02(0.93)

a

Slope * diabetes

-0.78 (9.39) .93

-0.02 (9.06) .99

-0.81 (9.12) .93

-0.57 (7.49) .94

-0.60 (8.78) .95

-0.90 (9.06) .92

-0.63 (9.50) .95

-0.90 (8.61) .92

-0.32 (8.49) .97

-0.61(0.29)

b

Level

18.12 (2.53) <.01

10.70 (0.73) <.01

38.24 (2.76) <.01

13.55 (0.99) <.01

30.06 (3.79) <.01

18.13 (2.35) <.01

26.06 (0.36) <.01

41.02 (3.20) <.01

166.61 (22.47) <.01

—

b

Slope

1.18 (0.49) .02
-0.03 (0.22) .89
-0.64 (0.68) .35
0.28 (0.22) .20
0.60 (0.78) .44
0.01 (0.46) .99
0.06 (0.09) .51
0.38 (0.59) .52
1.23 (6.88) .86

—

b

Level * age

-0.12 (0.16) .46
-0.04 (0.06) .47
-0.36 (0.18) .05
-0.06 (0.07) .40
-0.31 (0.27) .25
-0.13 (0.14) .36
-0.01 (0.03) .85
-0.42 (0.26) .11
1.95 (1.50) .19

—

b

Level * education

0.94 (0.27) <.01
0.26 (0.07) <.01
0.71 (0.29) .01
0.28 (0.09) <.01
1.24 (0.40) <.01
0.74 (0.23) <.01
0.09 (0.04) .03
1.79 (0.35) <.01
-7.85 (2.29) <.01

—

b

Level * height

-0.01 (0.11) .94
0.00 (0.03) .97
-0.14 (0.12) .27
0.03 (0.04) .46
-0.13 (0.19) .50
0.10 (0.10) .31
0.01 (0.02) .56
0.05 (0.18) .77
0.23 (0.89) .80

—

b

Level * smoking

1.68 (1.48) .25
0.40 (0.28) .15
1.31 (1.40) .35
0.38 (0.54) .48
2.97 (1.70) .08
0.51 (1.21) .67
0.24 (0.26) .37
2.33 (2.11) .27
-10.65 (10.53) .31

—

b

Level * cardio

-0.14 (3.31) .97
-0.85 (0.48) .08
1.00 (2.96) .73
-0.28 (1.09) .80
-1.98 (3.76) .60
0.44 (2.94) .88
-0.12 (0.25) .63
-5.00 (6.64) .45
25.78 (18.22) .16

—

b

Level * diabetes

-4.54 (2.63) .08
-1.67 (0.50) <.01
-5.21 (2.32) .02
-1.65 (0.84) .05
-6.79 (2.89) .02
-1.30 (2.29) .57
-0.14 (0.35) .68
-6.98 (2.60) .01
34.98 (20.40) .09

b

Slope * age

-0.05 (0.03) .08
-0.01 (0.01) .26
-0.03 (0.04) .48
-0.02 (0.02) .25
-0.08 (0.04) .06
-0.01 (0.03) .69
-0.01 (0.00) .27
-0.05 (0.03) .15
0.14 (0.39) .73

b

Slope * education

-0.10 (0.05) .06
0.00 (0.02) .93
0.07 (0.06) .27
-0.02 (0.02) .42
0.04 (0.08) .64
-0.00 (0.05) .98
0.00 (0.01) .82
-0.06 (0.08) .42
0.18 (0.68) .79

b
Slope * height
-0.01 (0.02) .56
0.00 (0.01) .88
0.02 (0.03) .51
-0.01 (0.01) .11
0.01 (0.02) .80
-0.01 (0.02) .61
-0.00 (0.00) .41
0.01 (0.03) .84
-0.06 (0.24) .82

b
Slope * smoking
-0.16 (0.30) .59
0.03 (0.12) .80
-0.12 (0.43) .78
-0.01 (0.13) .95
-0.10 (0.40) .81
0.02 (0.33) .95
-0.02 (0.06) .79
0.04 (0.42) .92
-0.63 (3.38) .85

b
Slope * cardio
-0.18 (1.01) .86
0.21 (0.24) .38
0.04 (0.64) .95
-0.13 (0.36) .71
0.05 (0.67) .94
0.20 (0.90) .82
-0.03 (0.06) .67
0.03 (0.99) .97
-1.40 (5.83) .81

b

Slope * diabetes

0.24 (0.47) .60

-0.02 (0.13) .90

0.06 (0.63) .92

0.08 (0.17) .62

0.34 (0.62) .58

-0.02 (0.42) .96

0.00 (0.07) .95

-0.14 (0.45) .75

0.87 (6.36) .89

—

a

Var (Level)

4757.17 (1058.63) <.01

4795.15 (1076.44) <.01

4731.45 (1077.23) <.01

4696.38 (1063.62) <.01

4694.15 (1112.43) <.01

4740.04 (1119.15) <.01

4730.52 (1018.57) <.01

4717.27 (1064.59) <.01

4770.99 (1064.73) <.01

4737.01(33.36)

a

Var (Slope)

63.00 (37.32) .09

67.61 (40.63) .10

60.59 (48.50) .21

54.89 (37.53) .14

57.15 (40.44) .16

63.25 (44.38) .15

59.69 (36.71) .10

60.58 (40.98) .14

66.24 (44.04) .13

61.44(4.07)

a

Var (Residual)

1641.56 (98.64) <.01
1634.34 (88.65) <.01
1646.80 (102.90) <.01
1644.36 (122.02) <.01
1641.68 (91.23) <.01
1643.43 (100.58) <.01
1642.49 (83.24) <.01
1638.82 (92.29) <.01
1629.70 (85.33) <.01
1640.35(5.33)

b

Var (Level)

46.55 (9.62) <.01
2.83 (0.85) <.01
56.55 (11.05) <.01
5.80 (1.38) <.01
104.84 (23.99) <.01
22.45 (5.18) <.01
0.97 (0.25) <.01
105.78 (18.62) <.01
2288.23 (751.49) <.01

—

b

Var (Slope)

0.11 (0.30) .71
0.03 (0.03) .35
0.91 (0.45) .04
0.06 (0.05) .21
0.31 (0.51) .54
0.11 (0.20) .58
0.00 (0.01) .71
0.24 (0.43) .59
8.22 (27.63) .77

—

b

Var (Residual)

19.91 (1.67) <.01

1.71 (0.13) <.01

15.62 (1.36) <.01

2.39 (0.24) <.01

25.13 (2.10) <.01

14.44 (1.31) <.01

0.56 (0.03) <.01

28.79 (2.17) <.01

1484.54 (82.45) <.01

—

a

Covar (Level, Slope)

-364.07 (164.22) .03

-378.74 (175.52) .03

-356.83 (169.03) .04

-327.77 (157.85) .04

-333.56 (170.01) .05

-363.80 (181.81) .04

-348.69 (157.32) .03

-346.09 (168.50) .04

-369.10 (186.23) .05

-354.29(16.74)

b

Covar (Level, Slope)

-1.01 (1.65) .54

0.21 (0.17) .20

-0.26 (1.55) .87

0.03 (0.18) .86

1.46 (2.93) .62

0.57 (0.94) .54

0.00 (0.03) .98

-0.06 (2.60) .98

54.37 (152.31) .72

—

Correlation of Levels

0.191

0.327

0.160

-0.172

0.0421

0.25

0.3084

0.285

-0.248

0.13(0.21)

Correlation of Slopes

-0.114

-0.307

-0.165

-0.422

-0.5167

0.20

0.2576

0.511

-0.228

-0.09(0.34)

Correlation of Residuals

0.022

0.031

-0.059

0.068

0.0063

0.11

-0.0024

0.013

-0.044

0.02(0.05)

N
150
150
150
150
150
150
150
150
150
150.00(0.00)

occasions

7
7
7
7
7
7
7
7
7
7.00(0.00)

parameters

41
41
41
41
41
41
41
41
41
41.00(0.00)

LL

-4,401

-3,668

-4,387

-3,766

-4,528

-4,277

-3,301

-4,554

-5,694

-4,286(685)

AIC

8,884

7,418

8,855

7,614

9,139

8,636

6,685

9,190

11,470

8,654(1,371)

BIC

9,007

7,541

8,979

7,737

9,262

8,759

6,808

9,313

11,593

8,778(1,371)

block

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

process

label

ae

aeH

aeHplus

full

ab

Covar (Levels)

98.99 (49.69) .05

104.78 (52.19) .04

90.07 (75.15) .23

88.17 (79.03) .26

ab

Covar (Slopes)

3.73 (1.23) <.01

0.21 (1.09) .85

-0.30 (2.64) .91

0.44 (2.21) .84

ab

Covar (Residuals)

-0.39 (9.43) .97

-1.25 (10.27) .90

3.98 (17.73) .82

0.44 (16.60) .98

er

Corr (Levels)

—

—

0.19 (0.15) .21

—

er

Corr (Slopes)

—

—

-0.11 (1.02) .91

—

er

Corr (Residuals)

—

—

0.02 (0.10) .82

—

a

Level

310.35 (17.37) <.01

333.07 (17.93) <.01

342.20 (26.25) <.01

339.07 (26.69) <.01

a

Slope

-10.71 (4.20) .01

-26.73 (4.00) <.01

-27.18 (7.83) <.01

-26.99 (7.29) <.01

a

Level * age

-4.09 (1.22) <.01

-4.25 (1.29) <.01

-4.25 (1.85) .02

-4.40 (1.80) .01

a

Level * education

0.89 (1.78) .62

-1.60 (1.88) .39

-1.87 (2.75) .50

-2.11 (2.71) .44

a

Level * height

—

0.55 (0.85) .52

0.37 (1.31) .78
0.32 (1.30) .81

a

Level * smoking

—

—

-0.48 (13.03) .97
-0.33 (13.19) .98

a

Level * cardio

—

—

-22.81 (36.56) .53
-22.61 (36.18) .53

a

Level * diabetes

—

—

-25.83 (26.42) .33
-27.79 (25.94) .28

a

Slope * age

-0.24 (0.26) .35
0.19 (0.26) .46
0.15 (0.50) .76
0.19 (0.42) .64

a

Slope * education

-0.40 (0.41) .33
0.60 (0.45) .19
0.56 (0.85) .51
0.74 (0.76) .33

a

Slope * height

—

0.55 (0.20) .01

0.63 (0.29) .03
 0.64 (0.29) .02
 a
 Slope * smoking

1.86 (3.28) .57
 1.88 (3.05) .54

a
 Slope * cardio

3.10 (10.80) .77
 2.31 (10.17) .82

a
 Slope * diabetes

-0.78 (9.39) .93
 -0.18 (9.68) .98

b
 Level
 13.93 (0.95) <.01
 18.43 (1.90) <.01
 18.12 (2.53) <.01
 19.33 (2.75) <.01

b
 Slope
 1.12 (0.20) <.01
 0.73 (0.37) .05
 1.18 (0.49) .02
 0.73 (0.49) .14

b
 Level * age
 -0.16 (0.07) .02
 -0.12 (0.15) .41

-0.12 (0.16) .46
 -0.14 (0.16) .39
 b
 Level * education
 1.06 (0.11) <.01
 0.92 (0.21) <.01
 0.94 (0.27) <.01
 0.88 (0.26) <.01
 b
 Level * height
 —
 -0.01 (0.09) .89
 -0.01 (0.11) .94
 -0.01 (0.11) .96
 b
 Level * smoking
 —
 —
 1.68 (1.48) .25
 1.51 (1.45) .30
 b
 Level * cardio
 —
 —
 -0.14 (3.31) .97
 -0.29 (2.93) .92
 b
 Level * diabetes
 —
 —
 -4.54 (2.63) .08
 -4.30 (2.58) .10
 b
 Slope * age
 -0.03 (0.01) .04
 -0.04 (0.02) .10

| | |
|-------------------|------|
| -0.05 (0.03) | .08 |
| -0.04 (0.03) | .17 |
| b | |
| Slope * education | |
| -0.08 (0.02) | <.01 |
| -0.07 (0.04) | .09 |
| -0.10 (0.05) | .06 |
| -0.07 (0.05) | .18 |
| b | |
| Slope * height | |
| — | |
| -0.01 (0.01) | .48 |
| -0.01 (0.02) | .56 |
| -0.01 (0.02) | .63 |
| b | |
| Slope * smoking | |
| — | |
| — | |
| -0.16 (0.30) | .59 |
| -0.10 (0.28) | .73 |
| b | |
| Slope * cardio | |
| — | |
| — | |
| -0.18 (1.01) | .86 |
| -0.07 (0.87) | .94 |
| b | |
| Slope * diabetes | |
| — | |
| — | |
| 0.24 (0.47) | .60 |
| 0.16 (0.47) | .73 |
| a | |
| Var (Level) | |
| 5212.32 (755.47) | <.01 |
| 4780.41 (801.53) | <.01 |

4757.17 (1058.63) <.01

4629.68 (1058.37) <.01

a

Var (Slope)

119.91 (37.08) <.01

44.62 (31.72) .16

63.00 (37.32) .09

38.91 (32.62) .23

a

Var (Residual)

1695.37 (386.98) <.01

1703.01 (503.91) <.01

1641.56 (98.64) <.01

1689.57 (104.83) <.01

b

Var (Level)

54.09 (4.90) <.01

51.46 (8.54) <.01

46.55 (9.62) <.01

46.15 (9.21) <.01

b

Var (Slope)

0.26 (0.11) .01

0.16 (0.14) .26

0.11 (0.30) .71

0.14 (0.24) .57

b

Var (Residual)

21.49 (1.14) <.01

19.77 (1.49) <.01

19.91 (1.67) <.01

19.77 (1.58) <.01

a

Covar (Level, Slope)

-454.24 (161.68) <.01

-312.88 (173.77) .07

-364.07 (164.22) .03

-307.89 (149.73) .04

b

Covar (Level, Slope)

-2.10 (0.56) <.01

-1.21 (0.93) .19

-1.01 (1.65) .54

-0.91 (1.46) .53

Correlation of Levels

0.186

0.2113

0.191

0.1907

Correlation of Slopes

0.671

0.0781

-0.114

0.1912

Correlation of Residuals

-0.002

-0.0068

0.022

0.0024

N

563

150

150

150

occasions

9

8

7

8

parameters

25

29

41

45

LL

-9,195

-4,535

-4,401

-4,524

AIC

18,439

9,128

8,884

9,138

BIC

18,548

9,216

9,007

9,273

bnt

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

process

label

aeplus

ab

Covar (Levels)

38.07 (22.34) .09

ab

Covar (Slopes)
 -0.45 (1.15) .69
 ab
 Covar (Residuals)
 1.66 (7.29) .82
 er
 Corr (Levels)
 0.33 (0.18) .07
 er
 Corr (Slopes)
 -0.31 (0.74) .68
 er
 Corr (Residuals)
 0.03 (0.14) .82
 a
 Level
 341.34 (26.84) <.01
 a
 Slope
 -26.24 (7.22) <.01
 a
 Level * age
 -4.28 (1.90) .02
 a
 Level * education
 -1.81 (2.92) .54
 a
 Level * height
 0.41 (1.30) .75
 a
 Level * smoking
 -0.02 (17.75) .99
 a
 Level * cardio
 -20.09 (27.01) .46
 a

Level * diabetes
 -27.08 (25.93) .30
 a
 Slope * age
 0.16 (0.51) .75
 a
 Slope * education
 0.49 (0.86) .57
 a
 Slope * height
 0.62 (0.30) .04
 a
 Slope * smoking
 1.61 (4.82) .74
 a
 Slope * cardio
 1.03 (9.56) .91
 a
 Slope * diabetes
 -0.02 (9.06) .99
 b
 Level
 10.70 (0.73) <.01
 b
 Slope
 -0.03 (0.22) .89
 b
 Level * age
 -0.04 (0.06) .47
 b
 Level * education
 0.26 (0.07) <.01
 b
 Level * height
 0.00 (0.03) .97
 b

Level * smoking
 0.40 (0.28) .15
 b
 Level * cardio
 -0.85 (0.48) .08
 b
 Level * diabetes
 -1.67 (0.50) <.01
 b
 Slope * age
 -0.01 (0.01) .26
 b
 Slope * education
 0.00 (0.02) .93
 b
 Slope * height
 0.00 (0.01) .88
 b
 Slope * smoking
 0.03 (0.12) .80
 b
 Slope * cardio
 0.21 (0.24) .38
 b
 Slope * diabetes
 -0.02 (0.13) .90
 a
 Var (Level)
 4795.15 (1076.44) <.01
 a
 Var (Slope)
 67.61 (40.63) .10
 a
 Var (Residual)
 1634.34 (88.65) <.01
 b

Var (Level)
2.83 (0.85) <.01

b

Var (Slope)
0.03 (0.03) .35

b

Var (Residual)
1.71 (0.13) <.01

a

Covar (Level, Slope)
-378.74 (175.52) .03

b

Covar (Level, Slope)
0.21 (0.17) .20

Correlation of Levels
0.327

Correlation of Slopes
-0.307

Correlation of Residuals
0.031

N
150

occasions
7

parameters
41

LL
-3,668

AIC
7,418

BIC
7,541

categories

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

process

label

achplus

ab

Covar (Levels)

82.62 (74.98) .27

ab

Covar (Slopes)

-1.22 (3.96) .76

ab

Covar (Residuals)

-9.54 (13.85) .49

er

Corr (Levels)

0.16 (0.14) .25

er

Corr (Slopes)

-0.16 (0.54) .76

er

Corr (Residuals)

-0.06 (0.09) .49

a

Level

343.84 (25.16) <.01

a

Slope

-28.00 (7.73) <.01

a

Level * age
 -4.29 (1.84) .02
 a
 Level * education
 -2.00 (2.77) .47
 a
 Level * height
 0.39 (1.24) .75
 a
 Level * smoking
 -0.81 (14.50) .95
 a
 Level * cardio
 -23.40 (25.18) .35
 a
 Level * diabetes
 -26.05 (26.77) .33
 a
 Slope * age
 0.19 (0.51) .71
 a
 Slope * education
 0.61 (0.90) .50
 a
 Slope * height
 0.63 (0.31) .05
 a
 Slope * smoking
 2.05 (3.42) .55
 a
 Slope * cardio
 3.72 (8.39) .66
 a
 Slope * diabetes
 -0.81 (9.12) .93
 b

Level
 38.24 (2.76) <.01
 b
 Slope
 -0.64 (0.68) .35
 b
 Level * age
 -0.36 (0.18) .05
 b
 Level * education
 0.71 (0.29) .01
 b
 Level * height
 -0.14 (0.12) .27
 b
 Level * smoking
 1.31 (1.40) .35
 b
 Level * cardio
 1.00 (2.96) .73
 b
 Level * diabetes
 -5.21 (2.32) .02
 b
 Slope * age
 -0.03 (0.04) .48
 b
 Slope * education
 0.07 (0.06) .27
 b
 Slope * height
 0.02 (0.03) .51
 b
 Slope * smoking
 -0.12 (0.43) .78
 b

Slope * cardio
 0.04 (0.64) .95
 b
 Slope * diabetes
 0.06 (0.63) .92
 a
 Var (Level)
 4731.45 (1077.23) <.01
 a
 Var (Slope)
 60.59 (48.50) .21
 a
 Var (Residual)
 1646.80 (102.90) <.01
 b
 Var (Level)
 56.55 (11.05) <.01
 b
 Var (Slope)
 0.91 (0.45) .04
 b
 Var (Residual)
 15.62 (1.36) <.01
 a
 Covar (Level, Slope)
 -356.83 (169.03) .04
 b
 Covar (Level, Slope)
 -0.26 (1.55) .87

 Correlation of Levels
 0.160

 Correlation of Slopes
 -0.165

Correlation of Residuals

-0.059

N

150

occasions

7

parameters

41

LL

-4,387

AIC

8,855

BIC

8,979

digit_tot

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

process

label

a

ae

aeH

aeHplus

ab

Covar (Levels)

3.51 (31.06) .91

-1.14 (29.85) .97

-17.42 (25.92) .50

-28.45 (25.50) .26

ab

Covar (Slopes)

1.22 (1.07) .25

1.09 (1.06) .30

-0.75 (0.90) .40

-0.76 (1.13) .50

ab

Covar (Residuals)

0.68 (3.87) .86

0.61 (3.87) .88

4.47 (6.59) .50

4.25 (7.08) .55

er

Corr (Levels)

—

—

—

-0.17 (0.15) .25

er

Corr (Slopes)

—

—

—

-0.42 (0.60) .48

er

Corr (Residuals)

—

—

—

0.07 (0.11) .55

a

Level

317.52 (14.43) <.01

312.29 (21.04) <.01

335.31 (24.64) <.01

343.60 (25.89) <.01

a

Slope

-12.73 (3.31) <.01

-9.96 (5.25) .06

-27.66 (5.42) <.01

-28.01 (7.20) <.01

a

Level * age

-3.97 (1.40) <.01

-4.01 (1.42) <.01

-4.40 (1.76) .01

-4.33 (1.86) .02

a

Level * education

—

0.90 (2.26) .69

-1.64 (2.81) .56

-1.84 (2.93) .53

a

Level * height

—

—

0.54 (1.19) .65

0.42 (1.26) .73

a

Level * smoking

—

—

—

-0.66 (15.24) .96

a

Level * cardio

—

—

—

-23.32 (29.17) .42

a

Level * diabetes

—

—

—

-25.87 (26.09) .32

a

Slope * age

-0.30 (0.36) .41

-0.29 (0.36) .42

0.28 (0.42) .50

0.22 (0.52) .68

a

Slope * education

—

-0.46 (0.62) .46

0.58 (0.70) .41

0.52 (0.84) .54

a

Slope * height

—

—

0.56 (0.30) .06

0.60 (0.35) .09

a

Slope * smoking

—

—

—

1.95 (3.42) .57

a

Slope * cardio

—

—

—

3.89 (9.43) .68

a

Slope * diabetes

—

—

—

-0.57 (7.49) .94

b

Level

13.52 (0.30) <.01

11.20 (0.41) <.01

13.40 (0.88) <.01

13.55 (0.99) <.01

b

Slope

0.25 (0.07) <.01

0.36 (0.11) <.01

0.20 (0.18) .27

0.28 (0.22) .20

b

Level * age

-0.04 (0.03) .21

-0.03 (0.03) .28

-0.07 (0.06) .29

-0.06 (0.07) .40

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) .46

b

Level * smoking

—

—

—

0.38 (0.54) .48

b

Level * cardio

—

—

—

-0.28 (1.09) .80

b

Level * diabetes

—

—

—

-1.65 (0.84) .05

b

Slope * age

-0.01 (0.01) .27

-0.01 (0.01) .26

-0.01 (0.01) .32

-0.02 (0.02) .25

b

Slope * education

—

-0.02 (0.01) .12

-0.02 (0.02) .41

-0.02 (0.02) .42

b

Slope * height

—

—

-0.01 (0.01) .19

-0.01 (0.01) .11

b

Slope * smoking

—

—

—

-0.01 (0.13) .95

b

Slope * cardio

—

—

—

-0.13 (0.36) .71

b

Slope * diabetes

—

—

—

0.08 (0.17) .62

a

Var (Level)

5464.40 (916.46) <.01

5443.31 (927.60) <.01

4799.93 (1076.88) <.01

4696.38 (1063.62) <.01

a

Var (Slope)

160.62 (41.39) <.01

156.69 (41.65) <.01

41.29 (28.58) .15

54.89 (37.53) .14

a

Var (Residual)

1625.55 (61.70) <.01

1623.78 (63.01) <.01

1700.25 (104.06) <.01

1644.36 (122.02) <.01

b

Var (Level)
10.64 (0.82) <.01

9.06 (0.73) <.01

6.39 (1.23) <.01

5.80 (1.38) <.01

b

Var (Slope)

0.10 (0.03) <.01

0.10 (0.03) <.01

0.05 (0.04) .16

0.06 (0.05) .21

b

Var (Residual)

2.69 (0.13) <.01

2.69 (0.13) <.01

2.39 (0.22) <.01

2.39 (0.24) <.01

a

Covar (Level, Slope)

-565.27 (163.30) <.01

-552.12 (169.75) <.01

-302.37 (132.32) .02

-327.77 (157.85) .04

b

Covar (Level, Slope)

-0.37 (0.16) .02

-0.30 (0.14) .04

0.02 (0.15) .89

0.03 (0.18) .86

Correlation of Levels

0.015

-0.0051

-0.099

-0.172

Correlation of Slopes

0.305

0.2791

-0.513

-0.422

Correlation of Residuals

0.010

0.0092

0.070

0.068

N

595

595

150

150

occasions

8

8

8

7

parameters

21

25

29

41

LL

-7,635

-7,596

-3,870

-3,766

AIC
 15,312
 15,241
 7,797
 7,614

BIC
 15,404
 15,351
 7,884
 7,737

fas

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

process

label

aehplus

ab

Covar (Levels)

29.54 (106.47) .78

ab

Covar (Slopes)

-2.18 (3.08) .48

ab

Covar (Residuals)

1.28 (24.00) .96

er

Corr (Levels)

0.04 (0.15) .78

er

Corr (Slopes)

-0.52 (0.84) .54

er

Corr (Residuals)

0.01 (0.12) .96

a

Level
 343.58 (24.89) <.01
 a
 Slope
 -28.26 (7.60) <.01
 a
 Level * age
 -4.27 (1.92) .03
 a
 Level * education
 -1.82 (2.71) .50
 a
 Level * height
 0.42 (1.33) .76
 a
 Level * smoking
 -0.92 (16.73) .96
 a
 Level * cardio
 -22.96 (25.21) .36
 a
 Level * diabetes
 -25.73 (26.01) .32
 a
 Slope * age
 0.18 (0.54) .73
 a
 Slope * education
 0.52 (0.81) .52
 a
 Slope * height
 0.62 (0.31) .04
 a
 Slope * smoking
 2.19 (3.87) .57
 a

Slope * cardio
 3.28 (8.14) .69
 a
 Slope * diabetes
 -0.60 (8.78) .95
 b
 Level
 30.06 (3.79) <.01
 b
 Slope
 0.60 (0.78) .44
 b
 Level * age
 -0.31 (0.27) .25
 b
 Level * education
 1.24 (0.40) <.01
 b
 Level * height
 -0.13 (0.19) .50
 b
 Level * smoking
 2.97 (1.70) .08
 b
 Level * cardio
 -1.98 (3.76) .60
 b
 Level * diabetes
 -6.79 (2.89) .02
 b
 Slope * age
 -0.08 (0.04) .06
 b
 Slope * education
 0.04 (0.08) .64
 b

Slope * height
 0.01 (0.02) .80
 b
 Slope * smoking
 -0.10 (0.40) .81
 b
 Slope * cardio
 0.05 (0.67) .94
 b
 Slope * diabetes
 0.34 (0.62) .58
 a
 Var (Level)
 4694.15 (1112.43) <.01
 a
 Var (Slope)
 57.15 (40.44) .16
 a
 Var (Residual)
 1641.68 (91.23) <.01
 b
 Var (Level)
 104.84 (23.99) <.01
 b
 Var (Slope)
 0.31 (0.51) .54
 b
 Var (Residual)
 25.13 (2.10) <.01
 a
 Covar (Level, Slope)
 -333.56 (170.01) .05
 b
 Covar (Level, Slope)
 1.46 (2.93) .62

Correlation of Levels

0.0421

Correlation of Slopes

-0.5167

Correlation of Residuals

0.0063

N

150

occasions

7

parameters

41

LL

-4,528

AIC

9,139

BIC

9,262

logic_tot

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

process

label

aeplus

ab

Covar (Levels)

81.32 (54.69) .14

ab

Covar (Slopes)
 0.53 (2.48) .83
 ab
 Covar (Residuals)
 17.14 (16.31) .29
 er
 Corr (Levels)
 0.25 (0.16) .12
 er
 Corr (Slopes)
 0.20 (0.94) .83
 er
 Corr (Residuals)
 0.11 (0.10) .29
 a
 Level
 341.08 (25.69) <.01
 a
 Slope
 -26.25 (7.30) <.01
 a
 Level * age
 -4.25 (1.81) .02
 a
 Level * education
 -1.77 (2.82) .53
 a
 Level * height
 0.40 (1.20) .74
 a
 Level * smoking
 -0.50 (13.62) .97
 a
 Level * cardio
 -20.77 (33.81) .54
 a

Level * diabetes
 -25.45 (28.04) .36
 a
 Slope * age
 0.15 (0.53) .78
 a
 Slope * education
 0.48 (0.90) .59
 a
 Slope * height
 0.61 (0.29) .03
 a
 Slope * smoking
 1.77 (3.35) .60
 a
 Slope * cardio
 1.94 (13.93) .89
 a
 Slope * diabetes
 -0.90 (9.06) .92
 b
 Level
 18.13 (2.35) <.01
 b
 Slope
 0.01 (0.46) .99
 b
 Level * age
 -0.13 (0.14) .36
 b
 Level * education
 0.74 (0.23) <.01
 b
 Level * height
 0.10 (0.10) .31
 b

Level * smoking
 0.51 (1.21) .67
 b
 Level * cardio
 0.44 (2.94) .88
 b
 Level * diabetes
 -1.30 (2.29) .57
 b
 Slope * age
 -0.01 (0.03) .69
 b
 Slope * education
 -0.00 (0.05) .98
 b
 Slope * height
 -0.01 (0.02) .61
 b
 Slope * smoking
 0.02 (0.33) .95
 b
 Slope * cardio
 0.20 (0.90) .82
 b
 Slope * diabetes
 -0.02 (0.42) .96
 a
 Var (Level)
 4740.04 (1119.15) <.01
 a
 Var (Slope)
 63.25 (44.38) .15
 a
 Var (Residual)
 1643.43 (100.58) <.01
 b

Var (Level)
22.45 (5.18) <.01

b

Var (Slope)
0.11 (0.20) .58

b

Var (Residual)
14.44 (1.31) <.01

a

Covar (Level, Slope)
-363.80 (181.81) .04

b

Covar (Level, Slope)
0.57 (0.94) .54

Correlation of Levels
0.25

Correlation of Slopes
0.20

Correlation of Residuals
0.11

N
150

occasions
7

parameters
41

LL
-4,277

AIC
8,636

BIC
8,759

mmse

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

process

label

achplus

ab

Covar (Levels)

20.91 (12.09) .08

ab

Covar (Slopes)

0.11 (0.49) .82

ab

Covar (Residuals)

-0.07 (3.23) .98

er

Corr (Levels)

0.31 (0.16) .05

er

Corr (Slopes)

0.28 (1.27) .83

er

Corr (Residuals)

-0.00 (0.11) .98

a

Level

342.91 (27.58) <.01

a

Slope

-27.53 (8.51) <.01

a

Level * age
 -4.29 (1.87) .02
 a
 Level * education
 -1.87 (2.76) .50
 a
 Level * height
 0.40 (1.20) .73
 a
 Level * smoking
 -0.48 (13.74) .97
 a
 Level * cardio
 -22.51 (24.46) .36
 a
 Level * diabetes
 -25.80 (27.88) .35
 a
 Slope * age
 0.15 (0.50) .77
 a
 Slope * education
 0.57 (0.96) .55
 a
 Slope * height
 0.61 (0.31) .05
 a
 Slope * smoking
 1.90 (3.18) .55
 a
 Slope * cardio
 3.48 (10.03) .73
 a
 Slope * diabetes
 -0.63 (9.50) .95
 b

Level
 26.06 (0.36) <.01
 b
 Slope
 0.06 (0.09) .51
 b
 Level * age
 -0.01 (0.03) .85
 b
 Level * education
 0.09 (0.04) .03
 b
 Level * height
 0.01 (0.02) .56
 b
 Level * smoking
 0.24 (0.26) .37
 b
 Level * cardio
 -0.12 (0.25) .63
 b
 Level * diabetes
 -0.14 (0.35) .68
 b
 Slope * age
 -0.01 (0.00) .27
 b
 Slope * education
 0.00 (0.01) .82
 b
 Slope * height
 -0.00 (0.00) .41
 b
 Slope * smoking
 -0.02 (0.06) .79
 b

Slope * cardio
 -0.03 (0.06) .67
 b
 Slope * diabetes
 0.00 (0.07) .95
 a
 Var (Level)
 4730.52 (1018.57) <.01
 a
 Var (Slope)
 59.69 (36.71) .10
 a
 Var (Residual)
 1642.49 (83.24) <.01
 b
 Var (Level)
 0.97 (0.25) <.01
 b
 Var (Slope)
 0.00 (0.01) .71
 b
 Var (Residual)
 0.56 (0.03) <.01
 a
 Covar (Level, Slope)
 -348.69 (157.32) .03
 b
 Covar (Level, Slope)
 0.00 (0.03) .98

 Correlation of Levels
 0.3084

 Correlation of Slopes
 0.2576

Correlation of Residuals

-0.0024

N

150

occasions

7

parameters

41

LL

-3,301

AIC

6,685

BIC

6,808

symbol

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

process

label

a

ae

aeH

aeHplus

full

ab

Covar (Levels)

331.92 (108.27) <.01

342.04 (106.57) <.01

262.59 (126.47) .04

201.39 (111.31) .07

213.34 (123.52) .08

ab

Covar (Slopes)

10.97 (3.34) <.01

12.46 (4.36) <.01

3.53 (4.39) .42

1.93 (2.81) .49

2.56 (4.92) .60

ab

Covar (Residuals)

-1.96 (15.87) .90

1.80 (16.40) .91

-2.03 (23.02) .93

2.81 (22.77) .90

-2.07 (24.58) .93

er

Corr (Levels)

—

—

—

0.28 (0.14) .04

—

er

Corr (Slopes)

—

—

—

0.51 (0.92) .58

—

er

Corr (Residuals)

—

—

—

0.01 (0.10) .90

—

a

Level

311.44 (13.06) <.01

293.53 (20.69) <.01

327.85 (24.34) <.01

342.45 (25.32) <.01

333.18 (26.59) <.01

a

Slope

-11.58 (2.77) <.01

-5.54 (5.62) .32

-23.55 (7.43) <.01

-27.33 (6.77) <.01

-23.53 (9.30) .01

a

Level * age

-4.29 (1.33) <.01

-3.86 (1.41) .01

-4.09 (1.78) .02

-4.23 (1.80) .02

-4.27 (1.83) .02

a

Level * education

—

1.19 (2.35) .61

-1.15 (2.70) .67

-1.85 (2.72) .50

-1.61 (2.76) .56

a

Level * height

—

—

0.37 (1.15) .75

0.42 (1.22) .73

0.13 (1.22) .91

a

Level * smoking

—

—

—

-0.39 (15.10) .98

0.00 (15.99) .99

a

Level * cardio

—

—

—

-22.98 (28.80) .42

-24.20 (31.60) .44

a

Level * diabetes

—

—

—

-25.69 (25.50) .31

-24.36 (26.24) .35

a

Slope * age

-0.23 (0.34) .51

-0.40 (0.41) .34

0.11 (0.56) .84

0.15 (0.53) .78

0.14 (0.62) .83

a

Slope * education

—

-0.42 (0.73) .56

0.29 (0.91) .75

0.54 (0.81) .50

0.41 (0.98) .68

a

Slope * height

0.64 (0.40) .11
0.61 (0.32) .05
0.73 (0.41) .08
a
Slope * smoking

1.89 (3.69) .61
1.75 (5.38) .74
a
Slope * cardio

3.40 (10.31) .74
3.07 (11.47) .79
a
Slope * diabetes

-0.90 (8.61) .92
-2.07 (9.40) .83
b
Level
45.33 (1.24) <.01
32.42 (1.63) <.01
39.06 (3.07) <.01
41.02 (3.20) <.01
40.57 (3.68) <.01
b
Slope
0.54 (0.21) .01

1.16 (0.44) .01

0.56 (0.59) .34

0.38 (0.59) .52

0.62 (0.78) .42

b

Level * age

-0.59 (0.13) <.01

-0.57 (0.11) <.01

-0.35 (0.27) .20

-0.42 (0.26) .11

-0.38 (0.28) .17

b

Level * education

—

2.02 (0.17) <.01

1.89 (0.35) <.01

1.79 (0.35) <.01

1.79 (0.38) <.01

b

Level * height

—

—

0.08 (0.18) .66

0.05 (0.18) .77

0.05 (0.19) .78

b

Level * smoking

—

—

—

2.33 (2.11) .27

2.19 (2.01) .27

b

Level * cardio

—

—

-5.00 (6.64) .45
-4.96 (8.15) .54
b
Level * diabetes

-6.98 (2.60) .01
-6.75 (2.82) .02

b
Slope * age
-0.06 (0.02) .02
-0.04 (0.03) .09
-0.06 (0.04) .08
-0.05 (0.03) .15
-0.06 (0.04) .12
b
Slope * education

-0.09 (0.05) .06
-0.06 (0.07) .40
-0.06 (0.08) .42
-0.06 (0.09) .48

b
Slope * height

0.00 (0.03) .90
0.01 (0.03) .84
0.00 (0.04) .91

b
Slope * smoking

0.04 (0.42) .92

0.09 (0.48) .85

b

Slope * cardio

—

—

—

0.03 (0.99) .97

0.00 (1.37) .99

b

Slope * diabetes

—

—

—

-0.14 (0.45) .75

-0.24 (0.56) .66

a

Var (Level)

5314.26 (886.62) <.01

5924.42 (1072.31) <.01

4906.13 (1072.06) <.01

4717.27 (1064.59) <.01

4692.97 (1099.11) <.01

a

Var (Slope)

152.53 (39.36) <.01

257.04 (66.08) <.01

117.67 (64.73) .07

60.58 (40.98) .14

102.83 (69.68) .14

a

Var (Residual)

1665.82 (53.18) <.01

1539.24 (60.16) <.01

1618.46 (83.00) <.01

1638.82 (92.29) <.01

1617.21 (98.54) <.01

b

Var (Level)

189.81 (14.19) <.01

143.96 (11.26) <.01

127.61 (23.26) <.01

105.78 (18.62) <.01

114.18 (21.13) <.01

b

Var (Slope)

1.31 (0.28) <.01

1.77 (0.39) <.01

0.36 (0.50) .47

0.24 (0.43) .59

0.45 (0.63) .47

b

Var (Residual)

31.68 (1.23) <.01

30.30 (1.32) <.01

28.75 (2.01) <.01

28.79 (2.17) <.01

28.50 (2.24) <.01

a

Covar (Level, Slope)

-520.59 (153.38) <.01

-811.76 (241.28) <.01

-416.41 (219.35) .06

-346.09 (168.50) .04

-385.95 (225.58) .09

b

Covar (Level, Slope)

-6.08 (2.24) .01

-5.11 (2.05) .01

-1.49 (3.01) .62

-0.06 (2.60) .98

-2.31 (3.06) .45

Correlation of Levels

0.3305

0.3704

0.3319

0.285

0.2914

Correlation of Slopes

0.7770

0.5831

0.5397

0.511

0.3750

Correlation of Residuals

-0.0085

0.0084

-0.0094

0.013

-0.0096

N

592

592

150

150

150

occasions

9

7

6

7

6

parameters

21

25

29

41

45

LL

-10,104

-9,446

-4,340

-4,554

-4,326

AIC

20,249

18,943

8,738

9,190

8,742

BIC

20,341

19,052

8,826

9,313

8,878

trailsb

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

process

label

a

ae

aeH

aeHplus

```

full
ab
Covar (Levels)
-1437.76 (540.87) .01
-1308.71 (509.10) .01
-1005.15 (664.43) .13
-818.94 (707.87) .25
-731.95 (659.29) .27
ab
Covar (Slopes)
-11.72 (15.69) .46
-11.07 (16.06) .49
-4.41 (27.72) .87
-5.32 (37.39) .89
-0.25 (28.09) .99
ab
Covar (Residuals)
17.39 (148.22) .91
13.54 (154.65) .93
-80.60 (224.45) .72
-68.68 (221.61) .76
-80.64 (247.59) .74
er
Corr (Levels)
—
—
—
-0.25 (0.20) .20
—
er
Corr (Slopes)
—
—
—
-0.23 (1.59) .89
—

```

er

Corr (Residuals)

—

—

—

-0.04 (0.14) .76

—

a

Level

319.62 (13.00) <.01

313.50 (20.64) <.01

332.19 (25.63) <.01

340.94 (26.56) <.01

338.48 (26.86) <.01

a

Slope

-14.42 (2.89) <.01

-11.07 (4.82) .02

-25.89 (6.46) <.01

-26.21 (7.99) <.01

-26.65 (7.66) <.01

a

Level * age

-4.57 (1.31) <.01

-4.50 (1.31) <.01

-4.17 (1.83) .02

-4.19 (2.02) .04

-4.35 (1.93) .02

a

Level * education

—

1.07 (2.21) .63

-1.56 (2.65) .56

-1.72 (2.70) .52

-2.06 (2.57) .42

a

Level * height

—

—

0.60 (1.18) .61

0.46 (1.27) .72

0.35 (1.24) .78

a

Level * smoking

—

—

—

-0.21 (15.50) .99

-0.14 (16.04) .99

a

Level * cardio

—

—

—

-23.02 (29.25) .43

-22.83 (30.59) .46

a

Level * diabetes

—

—

—

-26.52 (24.59) .28

-28.03 (25.56) .27

a

Slope * age

-0.13 (0.33) .69

-0.15 (0.33) .64

0.14 (0.44) .76

0.11 (0.66) .87

0.15 (0.53) .77

a

Slope * education

| | | |
|------------------|--------|------|
| — | | |
| -0.54 | (0.58) | .35 |
| 0.54 | (0.70) | .44 |
| 0.45 | (0.90) | .62 |
| 0.70 | (0.75) | .35 |
| a | | |
| Slope * height | | |
| — | | |
| — | | |
| 0.51 | (0.27) | .05 |
| 0.57 | (0.34) | .10 |
| 0.61 | (0.28) | .03 |
| a | | |
| Slope * smoking | | |
| — | | |
| — | | |
| — | | |
| 1.77 | (4.27) | .68 |
| 1.88 | (4.02) | .64 |
| a | | |
| Slope * cardio | | |
| — | | |
| — | | |
| — | | |
| 3.38 | (9.52) | .72 |
| 2.44 | (9.21) | .79 |
| a | | |
| Slope * diabetes | | |
| — | | |
| — | | |
| — | | |
| -0.32 | (8.49) | .97 |
| -0.06 | (9.22) | .99 |
| b | | |
| Level | | |
| 125.49 | (7.24) | <.01 |

175.12 (7.45) <.01

171.28 (18.58) <.01

166.61 (22.47) <.01

172.13 (21.87) <.01

b

Slope

0.80 (1.30) .54

-0.55 (2.05) .79

2.42 (5.06) .63

1.23 (6.88) .86

2.73 (6.22) .66

b

Level * age

2.50 (0.64) <.01

2.31 (0.58) <.01

1.63 (1.38) .24

1.95 (1.50) .19

2.06 (1.48) .16

b

Level * education

—

-7.73 (0.90) <.01

-7.82 (2.03) <.01

-7.85 (2.29) <.01

-7.32 (2.27) <.01

b

Level * height

—

—

-0.04 (0.78) .96

0.23 (0.89) .80

0.27 (0.92) .76

b

Level * smoking

—

—

—
-10.65 (10.53) .31
-11.97 (9.91) .23

b

Level * cardio

—

—

—

25.78 (18.22) .16

29.70 (21.00) .16

b

Level * diabetes

—

—

—

34.98 (20.40) .09

33.33 (17.81) .06

b

Slope * age

0.29 (0.14) .04

0.30 (0.14) .04

0.21 (0.27) .43

0.14 (0.39) .73

0.19 (0.34) .58

b

Slope * education

—

0.20 (0.21) .33

-0.05 (0.57) .93

0.18 (0.68) .79

-0.11 (0.61) .86

b

Slope * height

—

—

0.02 (0.18) .89

-0.06 (0.24) .82

-0.01 (0.22) .97

b

Slope * smoking

—

—

—

-0.63 (3.38) .85

-0.31 (2.98) .92

b

Slope * cardio

—

—

—

-1.40 (5.83) .81

-2.00 (6.44) .76

b

Slope * diabetes

—

—

—

0.87 (6.36) .89

2.66 (5.06) .60

a

Var (Level)

5503.46 (922.85) <.01

5447.84 (926.92) <.01

4821.22 (1077.52) <.01

4770.99 (1064.73) <.01

4624.91 (1121.08) <.01

a

Var (Slope)

130.76 (35.96) <.01

124.33 (35.54) <.01

48.62 (27.63) .08

66.24 (44.04) .13

39.51 (33.94) .24

a

Var (Residual)

1683.17 (52.72) <.01

1681.28 (52.10) <.01

1690.11 (79.14) <.01

1629.70 (85.33) <.01

1684.30 (89.20) <.01

b

Var (Level)

3389.97 (471.25) <.01

2698.95 (377.73) <.01

2724.82 (689.38) <.01

2288.23 (751.49) <.01

2258.31 (713.54) <.01

b

Var (Slope)

6.98 (9.28) .45

7.33 (9.45) .44

7.46 (16.87) .66

8.22 (27.63) .77

5.73 (18.88) .76

b

Var (Residual)

1740.06 (48.32) <.01

1740.02 (48.04) <.01

1478.80 (71.16) <.01

1484.54 (82.45) <.01

1475.00 (76.52) <.01

a

Covar (Level, Slope)

-518.71 (152.31) <.01

-491.83 (158.00) <.01

-324.32 (139.94) .02

-369.10 (186.23) .05

-305.61 (167.55) .07

b

Covar (Level, Slope)

32.29 (68.53) .64

45.66 (66.49) .49

49.10 (103.59) .64

54.37 (152.31) .72

46.60 (133.62) .73

Correlation of Levels

-0.33

-0.3413

-0.277

-0.248

-0.226

Correlation of Slopes

-0.39

-0.3667

-0.231

-0.228

-0.016

Correlation of Residuals

0.01

0.0079

-0.051

-0.044

-0.051

N

580

580

150

150

150

occasions

9

9

8

7

8

parameters

21

25

29

41

45

LL

-13,187

-13,142

-5,891

-5,694

-5,875

AIC

26,416

26,333

11,840

11,470

11,840

BIC

26,507

26,442

11,928

11,593

11,975

Summary

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

Computed correlations:

label

process_b

a

ae

aih

aihplus

full

Correlation of Levels

block

.

0.19

0.21

0.19

0.19

Correlation of Levels

bnt

.

.

.

0.33

.

Correlation of Levels

categories

.

.

.

0.16

.

Correlation of Levels

digit_tot

0.01

-0.01

-0.10

-0.17

.

Correlation of Levels

fas

.

.

.

0.04

.

Correlation of Levels

logic_tot

.

.

.

0.25

.

Correlation of Levels

mmse

.

.

.

0.31

.

Correlation of Levels

symbol

0.33

0.37

0.33

0.29

0.29

Correlation of Levels

trailsb

-0.33

-0.34

-0.28

-0.25

-0.23
 label
 process_b
 a
 ae
 aeh
 aehplus
 full
 Correlation of Slopes
 block
 .
 0.67
 0.08
 -0.11
 0.19
 Correlation of Slopes
 bnt
 .
 .
 .
 -0.31
 .
 Correlation of Slopes
 categories
 .
 .
 .
 -0.16
 .
 Correlation of Slopes
 digit_tot
 0.31
 0.28
 -0.51
 -0.42
 .

Correlation of Slopes

fas

.

.

.

-0.52

.

Correlation of Slopes

logic_tot

.

.

.

0.20

.

Correlation of Slopes

mmse

.

.

.

0.26

.

Correlation of Slopes

symbol

0.78

0.58

0.54

0.51

0.37

Correlation of Slopes

trailsb

-0.39

-0.37

-0.23

-0.23

-0.02

label

process_b
 a
 ae
 aeh
 aehplus
 full
 Correlation of Residuals
 block
 .
 -0.00
 -0.01
 0.02
 0.00
 Correlation of Residuals
 bnt
 .
 .
 .
 0.03
 .
 Correlation of Residuals
 categories
 .
 .
 .
 -0.06
 .
 Correlation of Residuals
 digit_tot
 0.01
 0.01
 0.07
 0.07
 .
 Correlation of Residuals
 fas

```

.
.
.
0.01
.
Correlation of Residuals
logic_tot
.
.
.
0.11
.
Correlation of Residuals
mmse
.
.
.
-0.00
.
Correlation of Residuals
symbol
-0.01
0.01
-0.01
0.01
-0.01
Correlation of Residuals
trailsb
0.01
0.01
-0.05
-0.04
-0.05
P-values for corresponding covariances:
label
process_b

```

a
ae
aeh
aehplus
full
Covariance of Levels
block
.
0.05
0.04
0.23
0.26
Covariance of Levels
bnt
.
.
.
0.09
.
Covariance of Levels
categories
.
.
.
0.27
.
Covariance of Levels
digit_tot
0.91
0.97
0.50
0.26
.
Covariance of Levels
fas
.

```

.
.
0.78
.
Covariance of Levels
logic__tot
.
.
.
0.14
.
Covariance of Levels
mmse
.
.
.
0.08
.
Covariance of Levels
symbol
0.00
0.00
0.04
0.07
0.08
Covariance of Levels
trailsb
0.01
0.01
0.13
0.25
0.27
label
process__b
a
ae

```

aeh
 aehplus
 full
 Covariance of Slopes
 block
 .
 0.00
 0.85
 0.91
 0.84
 Covariance of Slopes
 bnt
 .
 .
 .
 0.69
 .
 Covariance of Slopes
 categories
 .
 .
 .
 0.76
 .
 Covariance of Slopes
 digit_tot
 0.25
 0.30
 0.40
 0.50
 .
 Covariance of Slopes
 fas
 .
 .
 .

0.48
 .
 Covariance of Slopes
 logic_tot
 .
 .
 .
 0.83
 .
 Covariance of Slopes
 mmse
 .
 .
 .
 0.82
 .
 Covariance of Slopes
 symbol
 0.00
 0.00
 0.42
 0.49
 0.60
 Covariance of Slopes
 trailsb
 0.46
 0.49
 0.87
 0.89
 0.99
 label
 process_b
 a
 ae
 aeh
 aehplus

full

Covariance of Residuals

block

.

0.97

0.90

0.82

0.98

Covariance of Residuals

bnt

.

.

.

0.82

.

Covariance of Residuals

categories

.

.

.

0.49

.

Covariance of Residuals

digit_tot

0.86

0.88

0.50

0.55

.

Covariance of Residuals

fas

.

.

.

0.96

.

Covariance of Residuals

logic_tot

.

.

.

0.29

.

Covariance of Residuals

mmse

.

.

.

0.98

.

Covariance of Residuals

symbol

0.90

0.91

0.93

0.90

0.93

Covariance of Residuals

trailsb

0.91

0.93

0.72

0.76

0.74

male

Gender = *male*; Model type: *aeplus*; Process (a) = *pef*; Process (b): *block*, *bnt*, *categories*, *digit_tot*, *fas*, *logic_tot*, *mmse*, *symbol*, *trailsb*

process

label

block

bnt

```

categories
fas
logic_tot
mmse
symbol
mean(sd)
ab
Covar (Levels)
-113.69 (321.74) .72
-15.17 (69.84) .83
-152.56 (325.26) .64
-84.00 (457.25) .85
-120.30 (194.44) .54
3.42 (39.86) .93
6.90 (344.49) .98

```

```

ab
Covar (Slopes)
0.31 (15.23) .98
-0.34 (3.37) .92
-1.41 (14.54) .92
-6.28 (19.83) .75
5.46 (7.82) .48
1.42 (2.61) .59
1.26 (13.53) .93

```

```

ab
Covar (Residuals)
6.46 (46.91) .89
6.53 (19.29) .73
14.05 (48.44) .77
-1.30 (74.41) .99
17.12 (36.61) .64
6.43 (8.88) .47
-23.96 (53.19) .65

```

er

Corr (Levels)

-0.15 (0.44) .72

-0.10 (0.46) .83

-0.17 (0.35) .63

-0.07 (0.40) .85

-0.20 (0.34) .56

0.05 (0.62) .93

0.01 (0.36) .98

—

er

Corr (Slopes)

0.12 (6.25) .98

-0.16 (1.57) .92

-0.11 (1.11) .92

-0.66 (1.85) .72

0.67 (1.07) .53

0.90 (1.11) .42

0.08 (0.85) .92

—

er

Corr (Residuals)

0.02 (0.16) .89

0.09 (0.26) .74

0.05 (0.18) .77

-0.00 (0.25) .99

0.08 (0.17) .64

0.13 (0.19) .47

-0.08 (0.18) .66

—

a

Level

460.36 (99.06) <.01

451.32 (104.56) <.01

450.57 (123.22) <.01

448.83 (103.35) <.01

456.86 (98.09) <.01
452.80 (113.83) <.01
457.18 (97.64) <.01
453.99(4.20)

a

Slope

-36.40 (27.45) .18
-31.11 (27.68) .26
-31.45 (30.40) .30
-30.09 (32.83) .36
-34.53 (35.23) .33
-33.81 (30.08) .26
-34.05 (26.54) .20
-33.06(2.24)

a

Level * age

-6.37 (6.29) .31
-5.23 (5.34) .33
-5.69 (6.36) .37
-5.25 (6.02) .38
-5.34 (6.24) .39
-5.17 (6.51) .43
-5.51 (5.67) .33
-5.51(0.42)

a

Level * education

5.31 (9.61) .58
5.08 (9.56) .59
5.74 (11.10) .60
5.25 (9.24) .57
4.78 (9.01) .60
5.14 (10.16) .61
4.83 (8.19) .56
5.16(0.32)

a

Level * height

3.39 (4.74) .47
 2.76 (4.27) .52
 2.50 (4.13) .55
 2.68 (3.96) .50
 2.37 (3.88) .54
 2.46 (3.41) .47
 2.54 (3.58) .48
 2.67(0.34)

a

Level * smoking

-35.37 (73.79) .63
 -33.61 (74.75) .65
 -32.54 (70.17) .64
 -31.45 (61.98) .61
 -36.01 (70.96) .61
 -33.55 (80.02) .68
 -38.90 (76.04) .61
 -34.49(2.49)

a

Level * cardio

-20.22 (72.78) .78
 -23.03 (69.47) .74
 -23.81 (85.55) .78
 -23.77 (70.83) .74
 -22.74 (72.43) .75
 -27.24 (80.99) .74
 -20.74 (72.43) .78
 -23.08(2.31)

a

Level * diabetes

-17.74 (72.05) .80
 -15.09 (64.83) .82
 -15.04 (54.75) .78
 -15.79 (55.07) .77
 -14.61 (54.25) .79
 -15.10 (65.94) .82

-16.69 (51.98) .75

-15.72(1.12)

a

Slope * age

1.07 (1.62) .51

0.36 (1.72) .84

0.71 (1.88) .70

0.44 (1.91) .82

0.54 (1.88) .78

0.49 (1.76) .78

0.57 (1.70) .74

0.60(0.24)

a

Slope * education

-0.28 (2.50) .91

-0.20 (2.23) .93

-0.59 (2.61) .82

-0.34 (2.49) .89

-0.07 (2.57) .98

-0.23 (2.64) .93

-0.13 (2.18) .95

-0.26(0.17)

a

Slope * height

-0.06 (1.53) .97

0.32 (1.45) .82

0.48 (1.42) .73

0.40 (1.46) .78

0.62 (1.43) .66

0.54 (1.16) .64

0.55 (1.15) .64

0.41(0.23)

a

Slope * smoking

8.55 (13.40) .52

8.07 (14.12) .57

7.94 (13.58) .56
6.80 (15.82) .67
9.02 (17.20) .60
8.16 (14.71) .58
10.46 (17.99) .56
8.43(1.12)

a

Slope * cardio
-4.58 (16.59) .78
-0.81 (17.68) .96
-0.72 (15.06) .96
-0.26 (17.75) .99
-1.98 (21.64) .93
1.41 (17.95) .94
-1.88 (24.54) .94
-1.26(1.85)

a

Slope * diabetes
1.56 (19.14) .94
-0.25 (22.35) .99
-0.36 (17.61) .98
0.05 (15.55) .99
-0.22 (18.16) .99
-0.09 (19.09) .99
1.36 (15.23) .93
0.29(0.81)

b

Level
23.86 (7.73) <.01
11.05 (1.68) <.01
29.14 (8.42) <.01
25.03 (7.40) <.01
15.38 (5.50) <.01
26.59 (0.70) <.01
40.48 (9.13) <.01

—

b

Slope

1.57 (1.75) .37

0.23 (0.39) .56

1.06 (1.70) .53

1.33 (1.56) .40

1.77 (1.15) .12

-0.02 (0.31) .95

0.66 (2.08) .75

b

Level * age

0.24 (0.44) .59

0.03 (0.09) .71

-0.16 (0.45) .73

-0.04 (0.46) .93

-0.08 (0.30) .78

-0.00 (0.04) .97

-0.18 (0.38) .64

b

Level * education

0.63 (0.50) .21

0.10 (0.12) .38

1.14 (0.66) .08

1.62 (0.52) <.01

0.86 (0.33) .01

0.07 (0.06) .24

1.32 (0.81) .10

b

Level * height

0.06 (0.19) .76

0.00 (0.06) .95

-0.10 (0.24) .68

-0.36 (0.30) .23

0.09 (0.17) .57
0.00 (0.03) .98
0.10 (0.23) .67

—

b

Level * smoking

-4.09 (3.46) .24
0.99 (0.95) .30
3.53 (5.66) .53
1.82 (4.25) .67
-0.08 (3.31) .98
-0.22 (0.42) .60
0.42 (5.41) .94

—

b

Level * cardio

0.28 (3.57) .94
-0.36 (1.09) .74
-0.66 (7.67) .93
0.66 (7.36) .93
1.25 (2.63) .63
-0.03 (0.56) .95
-4.72 (5.51) .39

—

b

Level * diabetes

-3.43 (3.99) .39
-0.04 (0.91) .96
-0.75 (3.69) .84
-5.58 (4.16) .18
0.86 (3.04) .78
-0.04 (0.45) .92
-4.19 (4.86) .39

—

b

Slope * age

-0.08 (0.10) .39
 -0.02 (0.03) .43
 -0.06 (0.08) .47
 0.00 (0.07) .99
 -0.09 (0.08) .23
 -0.00 (0.02) .84
 -0.02 (0.08) .82

—

b

Slope * education

-0.11 (0.11) .33
 -0.01 (0.02) .71
 -0.15 (0.14) .29
 -0.15 (0.16) .34
 -0.13 (0.07) .08
 -0.00 (0.02) .90
 -0.17 (0.18) .34

—

b

Slope * height

-0.04 (0.05) .36
 0.01 (0.02) .76
 -0.02 (0.07) .78
 0.01 (0.07) .83
 -0.02 (0.04) .64
 -0.00 (0.01) .93
 0.01 (0.07) .88

—

b

Slope * smoking

0.32 (0.82) .70
 -0.23 (0.19) .22
 -0.37 (1.10) .73
 0.08 (0.91) .93
 -0.07 (0.72) .92
 0.07 (0.14) .60

-0.08 (0.98) .93

b

Slope * cardio

0.24 (1.40) .86

0.04 (0.39) .92

0.19 (1.43) .89

-0.47 (1.34) .72

-0.49 (1.10) .66

0.02 (0.19) .90

0.57 (1.62) .72

b

Slope * diabetes

-0.56 (1.01) .58

0.06 (0.28) .82

0.16 (0.93) .86

-0.26 (0.79) .74

0.82 (0.88) .35

0.01 (0.17) .94

0.19 (1.05) .86

a

Var (Level)

13435.43 (5867.31) .02

12826.85 (5567.93) .02

12987.75 (5824.20) .03

13100.68 (6328.99) .04

12861.00 (7065.11) .07

13498.16 (7104.04) .06

13294.09 (5899.23) .02

13143.42(270.75)

a

Var (Slope)

186.34 (228.03) .41

186.00 (272.20) .49

180.45 (291.64) .54
200.08 (318.09) .53
176.62 (314.29) .57
222.00 (310.45) .47
217.96 (300.61) .47
195.64(18.19)

a

Var (Residual)
3592.55 (504.56) <.01
3441.14 (698.92) <.01
3468.52 (625.64) <.01
3410.14 (480.58) <.01
3460.22 (747.13) <.01
3440.49 (552.54) <.01
3478.41 (692.94) <.01
3470.21(58.42)

b

Var (Level)
40.24 (21.78) .06
1.95 (1.35) .15
64.45 (21.43) <.01
95.09 (39.59) .02
28.36 (13.93) .04
0.30 (0.42) .48
69.21 (30.38) .02

—

b

Var (Slope)
0.03 (0.68) .96
0.03 (0.05) .63
0.87 (0.95) .35
0.45 (0.84) .59
0.38 (0.55) .50
0.01 (0.03) .72
1.12 (0.96) .24

—

b

Var (Residual)

24.10 (2.87) <.01

1.60 (0.24) <.01

20.44 (4.21) <.01

25.75 (3.79) <.01

13.52 (2.34) <.01

0.67 (0.13) <.01

25.64 (4.23) <.01

a

Covar (Level, Slope)

-1102.79 (1117.31) .32

-942.73 (1018.78) .35

-969.01 (954.07) .31

-1010.84 (1177.12) .39

-918.32 (1230.92) .46

-1146.23 (1383.22) .41

-1123.34 (1211.07) .35

-1030.46(92.82)

b

Covar (Level, Slope)

-0.25 (3.45) .94

0.11 (0.20) .59

-5.52 (3.64) .13

0.56 (6.82) .93

-1.25 (2.61) .63

0.03 (0.11) .80

0.66 (4.91) .89

Correlation of Levels

-0.155

-0.096

-0.167

-0.0753

-0.199
0.054
0.0072
-0.09(0.09)

Correlation of Slopes

0.125
-0.155
-0.112
-0.6585
0.671
0.906
0.0805
0.12(0.53)

Correlation of Residuals

0.022
0.088
0.053
-0.0044
0.079
0.134
-0.0802
0.04(0.07)

N

72

72

72

72

72

72

72

72.00(0.00)

occasions

7

7

7

7

7

7

7

7.00(0.00)

parameters

41

41

41

41

41

41

41

41.00(0.00)

LL

-2,459

-2,029

-2,448

-2,505

-2,375

-1,861

-2,504

-2,312(259)

AIC

5,000

4,139

4,978

5,093

4,833

3,805

5,090
4,705(517)

BIC
5,093
4,233
5,072
5,186
4,926
3,898
5,183
4,799(517)

block

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

process

label

ae

aeH

aeHplus

ab

Covar (Levels)

-122.43 (137.12) .37

-89.80 (125.58) .47

-113.69 (321.74) .72

ab

Covar (Slopes)

-0.17 (3.37) .96

-0.13 (18.94) .99

0.31 (15.23) .98

ab

Covar (Residuals)

7.05 (22.67) .76

28.00 (36.76) .45

6.46 (46.91) .89

er

Corr (Levels)

—

—

-0.15 (0.44) .72

er

Corr (Slopes)

—

—

0.12 (6.25) .98

er

Corr (Residuals)

—

—

0.02 (0.16) .89

a

Level

468.26 (40.46) <.01

412.91 (49.38) <.01

460.36 (99.06) <.01

a

Slope

-18.94 (8.62) .03

-29.25 (10.46) <.01

-36.40 (27.45) .18

a

Level * age

-4.66 (2.91) .11

-5.16 (3.10) .10

-6.37 (6.29) .31

a

Level * education

0.38 (4.09) .93

5.99 (4.49) .18

5.31 (9.61) .58

a

Level * height

3.87 (2.76) .16
3.39 (4.74) .47
a
Level * smoking

-35.37 (73.79) .63
a
Level * cardio

-20.22 (72.78) .78
a
Level * diabetes

-17.74 (72.05) .80
a
Slope * age
-0.19 (0.61) .76
0.61 (0.79) .44
1.07 (1.62) .51
a
Slope * education
-0.02 (1.00) .98
0.36 (1.10) .74
-0.28 (2.50) .91
a
Slope * height

-0.64 (1.35) .63
-0.06 (1.53) .97
a
Slope * smoking

8.55 (13.40) .52

a

Slope * cardio

-4.58 (16.59) .78

a

Slope * diabetes

1.56 (19.14) .94

b

Level

20.52 (1.03) <.01

19.31 (3.81) <.01

23.86 (7.73) <.01

b

Slope

0.90 (0.26) <.01

1.57 (1.53) .31

1.57 (1.75) .37

b

Level * age

-0.02 (0.11) .88

0.31 (0.35) .38

0.24 (0.44) .59

b

Level * education

0.01 (0.03) .86

0.73 (0.30) .02

0.63 (0.50) .21

b

Level * height

0.01 (0.28) .97

0.06 (0.19) .76
b
Level * smoking

—

—

-4.09 (3.46) .24
b
Level * cardio

—

—

0.28 (3.57) .94
b
Level * diabetes

—

—

-3.43 (3.99) .39
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

-0.11 (0.11) .33

b

Slope * height

—

-0.04 (0.14) .81

-0.04 (0.05) .36

b

Slope * smoking

—

—

0.32 (0.82) .70

b
 Slope * cardio
 —
 —
 0.24 (1.40) .86
 b
 Slope * diabetes
 —
 —
 -0.56 (1.01) .58
 a
 Var (Level)
 12369.76 (3034.59) <.01
 12541.22 (3161.93) <.01
 13435.43 (5867.31) .02
 a
 Var (Slope)
 207.90 (118.40) .08
 204.82 (213.03) .34
 186.34 (228.03) .41
 a
 Var (Residual)
 4750.71 (840.79) <.01
 4397.04 (1166.62) <.01
 3592.55 (504.56) <.01
 b
 Var (Level)
 76.62 (7.95) <.01
 46.25 (13.11) <.01
 40.24 (21.78) .06
 b
 Var (Slope)
 0.15 (0.15) .31
 0.03 (7.94) .99
 0.03 (0.68) .96
 b

Var (Residual)

22.19 (1.50) <.01

23.78 (9.55) .01

24.10 (2.87) <.01

a

Covar (Level, Slope)

-767.90 (619.22) .21

-776.24 (651.36) .23

-1102.79 (1117.31) .32

b

Covar (Level, Slope)

-2.12 (1.19) .07

0.01 (12.80) .99

-0.25 (3.45) .94

Correlation of Levels

-0.126

-0.118

-0.155

Correlation of Slopes

-0.031

-0.052

0.125

Correlation of Residuals

0.022

0.087

0.022

N

350

72

72

occasions

9
8
7

parameters
25
29
41

LL
-5,823
-2,542
-2,459

AIC
11,697
5,143
5,000

BIC
11,793
5,209
5,093

bnt

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

process

label

aeplusplus

ab

Covar (Levels)

-15.17 (69.84) .83

ab

Covar (Slopes)

-0.34 (3.37) .92

ab

Covar (Residuals)
 6.53 (19.29) .73
 er
 Corr (Levels)
 -0.10 (0.46) .83
 er
 Corr (Slopes)
 -0.16 (1.57) .92
 er
 Corr (Residuals)
 0.09 (0.26) .74
 a
 Level
 451.32 (104.56) <.01
 a
 Slope
 -31.11 (27.68) .26
 a
 Level * age
 -5.23 (5.34) .33
 a
 Level * education
 5.08 (9.56) .59
 a
 Level * height
 2.76 (4.27) .52
 a
 Level * smoking
 -33.61 (74.75) .65
 a
 Level * cardio
 -23.03 (69.47) .74
 a
 Level * diabetes
 -15.09 (64.83) .82
 a

Slope * age
 0.36 (1.72) .84
 a
 Slope * education
 -0.20 (2.23) .93
 a
 Slope * height
 0.32 (1.45) .82
 a
 Slope * smoking
 8.07 (14.12) .57
 a
 Slope * cardio
 -0.81 (17.68) .96
 a
 Slope * diabetes
 -0.25 (22.35) .99
 b
 Level
 11.05 (1.68) <.01
 b
 Slope
 0.23 (0.39) .56
 b
 Level * age
 0.03 (0.09) .71
 b
 Level * education
 0.10 (0.12) .38
 b
 Level * height
 0.00 (0.06) .95
 b
 Level * smoking
 0.99 (0.95) .30
 b

Level * cardio
 -0.36 (1.09) .74
 b
 Level * diabetes
 -0.04 (0.91) .96
 b
 Slope * age
 -0.02 (0.03) .43
 b
 Slope * education
 -0.01 (0.02) .71
 b
 Slope * height
 0.01 (0.02) .76
 b
 Slope * smoking
 -0.23 (0.19) .22
 b
 Slope * cardio
 0.04 (0.39) .92
 b
 Slope * diabetes
 0.06 (0.28) .82
 a
 Var (Level)
 12826.85 (5567.93) .02
 a
 Var (Slope)
 186.00 (272.20) .49
 a
 Var (Residual)
 3441.14 (698.92) <.01
 b
 Var (Level)
 1.95 (1.35) .15
 b

Var (Slope)
0.03 (0.05) .63
b
Var (Residual)
1.60 (0.24) <.01
a
Covar (Level, Slope)
-942.73 (1018.78) .35
b
Covar (Level, Slope)
0.11 (0.20) .59

Correlation of Levels
-0.096

Correlation of Slopes
-0.155

Correlation of Residuals
0.088

N
72

occasions
7

parameters
41

LL
-2,029

AIC
4,139

BIC

4,233

categories

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

process

label

achplus

ab

Covar (Levels)

-152.56 (325.26) .64

ab

Covar (Slopes)

-1.41 (14.54) .92

ab

Covar (Residuals)

14.05 (48.44) .77

er

Corr (Levels)

-0.17 (0.35) .63

er

Corr (Slopes)

-0.11 (1.11) .92

er

Corr (Residuals)

0.05 (0.18) .77

a

Level

450.57 (123.22) <.01

a

Slope

-31.45 (30.40) .30

a

Level * age

-5.69 (6.36) .37

a

Level * education
5.74 (11.10) .60

a

Level * height
2.50 (4.13) .55

a

Level * smoking
-32.54 (70.17) .64

a

Level * cardio
-23.81 (85.55) .78

a

Level * diabetes
-15.04 (54.75) .78

a

Slope * age
0.71 (1.88) .70

a

Slope * education
-0.59 (2.61) .82

a

Slope * height
0.48 (1.42) .73

a

Slope * smoking
7.94 (13.58) .56

a

Slope * cardio
-0.72 (15.06) .96

a

Slope * diabetes
-0.36 (17.61) .98

b

Level
29.14 (8.42) <.01

b

Slope
 1.06 (1.70) .53
 b
 Level * age
 -0.16 (0.45) .73
 b
 Level * education
 1.14 (0.66) .08
 b
 Level * height
 -0.10 (0.24) .68
 b
 Level * smoking
 3.53 (5.66) .53
 b
 Level * cardio
 -0.66 (7.67) .93
 b
 Level * diabetes
 -0.75 (3.69) .84
 b
 Slope * age
 -0.06 (0.08) .47
 b
 Slope * education
 -0.15 (0.14) .29
 b
 Slope * height
 -0.02 (0.07) .78
 b
 Slope * smoking
 -0.37 (1.10) .73
 b
 Slope * cardio
 0.19 (1.43) .89
 b

Slope * diabetes

0.16 (0.93) .86

a

Var (Level)

12987.75 (5824.20) .03

a

Var (Slope)

180.45 (291.64) .54

a

Var (Residual)

3468.52 (625.64) <.01

b

Var (Level)

64.45 (21.43) <.01

b

Var (Slope)

0.87 (0.95) .35

b

Var (Residual)

20.44 (4.21) <.01

a

Covar (Level, Slope)

-969.01 (954.07) .31

b

Covar (Level, Slope)

-5.52 (3.64) .13

Correlation of Levels

-0.167

Correlation of Slopes

-0.112

Correlation of Residuals

0.053

N

72

occasions

7

parameters

41

LL

-2,448

AIC

4,978

BIC

5,072

digit_tot

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

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

```
Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf
Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf
Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf
Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf
Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf
Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf
process
```

label

a

ae

aeH

full

ab

Covar (Levels)

-70.53 (80.52) .38

-79.11 (82.09) .34

-103.44 (109.85) .35

-81.43 (142.00) .57

ab

Covar (Slopes)

-1.66 (2.07) .42

-1.73 (2.25) .44

-5.04 (4.14) .22

-4.07 (5.22) .43

ab

Covar (Residuals)

16.61 (8.93) .06

16.90 (9.43) .07

21.52 (14.71) .14

20.51 (20.13) .31

er

Corr (Levels)

—

—

—

er

Corr (Slopes)

er

Corr (Residuals)

a

Level

454.79 (29.61) <.01

436.64 (46.16) <.01

412.12 (66.58) <.01

477.18 (153.24) <.01

a

Slope

-15.22 (9.10) .10

-12.33 (13.96) .38

-31.06 (27.15) .25

-37.62 (40.31) .35

a

Level * age

-3.64 (3.32) .27

-3.64 (3.30) .27

-4.29 (5.78) .46

-5.20 (7.38) .48

a

Level * education

2.45 (5.00) .62

4.90 (7.21) .50

3.62 (9.86) .71

a

Level * height

—

—

3.31 (3.02) .27

3.48 (4.64) .45

a

Level * smoking

—

—

—

-42.30 (110.78) .70

a

Level * cardio

—

—

—

-30.08 (93.01) .75

a

Level * diabetes

—

—

—

-1.12 (61.35) .98

a

Slope * age

-0.56 (0.94) .55

-0.56 (1.01) .58

0.34 (2.25) .88

0.45 (2.93) .88

a

Slope * education

—

-0.39 (1.08) .72

0.98 (1.57) .53

1.15 (2.42) .64

a

Slope * height

—

—

-0.19 (0.98) .85

-0.20 (2.08) .92

a

Slope * smoking

—

—

—

5.88 (23.22) .80

a

Slope * cardio

—

—

—

9.02 (23.38) .70

a

Slope * diabetes

—

—

—

-3.37 (20.12) .87

b

Level

13.76 (0.39) <.01

13.75 (0.40) <.01

14.09 (2.16) <.01

13.69 (3.84) <.01

b

Slope

0.19 (0.08) .02

0.16 (0.11) .14

-0.34 (0.42) .42

-0.31 (0.80) .70

b

Level * age

-0.03 (0.04) .50

-0.03 (0.04) .50

-0.06 (0.14) .69

-0.04 (0.19) .83

b

Level * education

—

0.00 (0.01) .98

0.29 (0.19) .13

0.33 (0.26) .20

b

Level * height

—

—

-0.15 (0.07) .03

-0.12 (0.09) .15

b

Level * smoking

—

—

—

0.91 (1.95) .64

b

Level * cardio

—

—

—

0.66 (1.78) .71

b

Level * diabetes

—

—

—

-0.82 (1.92) .67

b

Slope * age

-0.00 (0.01) .62

-0.00 (0.01) .63

0.02 (0.03) .49

0.02 (0.04) .67

b

Slope * education

—

0.00 (0.01) .70

0.01 (0.03) .84

0.00 (0.05) .98

b

Slope * height

—

—

0.01 (0.01) .40

0.00 (0.02) .91

b

Slope * smoking

—

—

—

-0.09 (0.38) .81

b

Slope * cardio

—

—

—

0.03 (0.64) .96

b

Slope * diabetes

—

—

—

-0.10 (0.58) .86

a

Var (Level)

12724.37 (3116.69) <.01

12613.78 (3355.28) <.01

12625.82 (5395.72) .02

12472.82 (8409.86) .14

a

Var (Slope)

282.59 (137.18) .04

288.30 (153.70) .06

375.76 (442.97) .40

366.50 (775.59) .64

a

Var (Residual)

4844.77 (353.36) <.01

4854.50 (356.20) <.01

4192.50 (487.00) <.01

4119.94 (715.76) <.01

b

Var (Level)

12.48 (1.25) <.01

12.48 (1.25) <.01

11.10 (3.37) <.01

10.46 (4.10) .01

b

Var (Slope)

0.02 (0.03) .40

0.02 (0.03) .37

0.10 (0.08) .21

0.05 (0.12) .66

b

Var (Residual)

3.10 (0.17) <.01

3.09 (0.17) <.01

2.48 (0.37) <.01

2.56 (0.42) <.01

a

Covar (Level, Slope)

-980.03 (477.68) .04

-985.11 (503.33) .05

-931.01 (1187.26) .43

-1003.17 (1990.62) .61

b

Covar (Level, Slope)

-0.34 (0.19) .07

-0.36 (0.19) .06

-0.62 (0.55) .26

-0.51 (0.77) .50

Correlation of Levels

-0.18

-0.20

-0.28

-0.23

Correlation of Slopes

-0.67

-0.66

-0.81

-0.94

Correlation of Residuals

0.14

0.14

0.21

0.20

N

379

379

72

72

occasions

8

8

7

8

parameters

21

25

29

45

LL

-4,878

-4,877

-2,147

-2,175

AIC

9,798

9,805

4,352

4,439

BIC

9,881

9,903

4,418

4,542

fas

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

process

label

```

aehplus
ab
Covar (Levels)
-84.00 (457.25) .85
ab
Covar (Slopes)
-6.28 (19.83) .75
ab
Covar (Residuals)
-1.30 (74.41) .99
er
Corr (Levels)
-0.07 (0.40) .85
er
Corr (Slopes)
-0.66 (1.85) .72
er
Corr (Residuals)
-0.00 (0.25) .99
a
Level
448.83 (103.35) <.01
a
Slope
-30.09 (32.83) .36
a
Level * age
-5.25 (6.02) .38
a
Level * education
5.25 (9.24) .57
a
Level * height
2.68 (3.96) .50
a
Level * smoking

```

-31.45 (61.98) .61

a

Level * cardio

-23.77 (70.83) .74

a

Level * diabetes

-15.79 (55.07) .77

a

Slope * age

0.44 (1.91) .82

a

Slope * education

-0.34 (2.49) .89

a

Slope * height

0.40 (1.46) .78

a

Slope * smoking

6.80 (15.82) .67

a

Slope * cardio

-0.26 (17.75) .99

a

Slope * diabetes

0.05 (15.55) .99

b

Level

25.03 (7.40) <.01

b

Slope

1.33 (1.56) .40

b

Level * age

-0.04 (0.46) .93

b

Level * education

1.62 (0.52) <.01

b

Level * height

-0.36 (0.30) .23

b

Level * smoking

1.82 (4.25) .67

b

Level * cardio

0.66 (7.36) .93

b

Level * diabetes

-5.58 (4.16) .18

b

Slope * age

0.00 (0.07) .99

b

Slope * education

-0.15 (0.16) .34

b

Slope * height

0.01 (0.07) .83

b

Slope * smoking

0.08 (0.91) .93

b

Slope * cardio

-0.47 (1.34) .72

b

Slope * diabetes

-0.26 (0.79) .74

a

Var (Level)

13100.68 (6328.99) .04

a

Var (Slope)

200.08 (318.09) .53

a

Var (Residual)

3410.14 (480.58) <.01

b

Var (Level)

95.09 (39.59) .02

b

Var (Slope)

0.45 (0.84) .59

b

Var (Residual)

25.75 (3.79) <.01

a

Covar (Level, Slope)

-1010.84 (1177.12) .39

b

Covar (Level, Slope)

0.56 (6.82) .93

Correlation of Levels

-0.0753

Correlation of Slopes

-0.6585

Correlation of Residuals

-0.0044

N

72

occasions

7

parameters

41

LL

-2,505

AIC

5,093

BIC

5,186

logic_tot

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

process

label

aehplus

ab

Covar (Levels)

-120.30 (194.44) .54

ab

Covar (Slopes)

5.46 (7.82) .48

ab

Covar (Residuals)

17.12 (36.61) .64

er

Corr (Levels)

-0.20 (0.34) .56

er

Corr (Slopes)

0.67 (1.07) .53

er

Corr (Residuals)

0.08 (0.17) .64

a

Level

456.86 (98.09) <.01

a

Slope

-34.53 (35.23) .33

a

Level * age

-5.34 (6.24) .39

a

Level * education

4.78 (9.01) .60

a

Level * height

2.37 (3.88) .54

a

Level * smoking

-36.01 (70.96) .61

a

Level * cardio

-22.74 (72.43) .75

a

Level * diabetes

-14.61 (54.25) .79

a

Slope * age

0.54 (1.88) .78

a

Slope * education

-0.07 (2.57) .98

a

Slope * height

0.62 (1.43) .66

a

Slope * smoking

9.02 (17.20) .60

a

Slope * cardio

-1.98 (21.64) .93
a
Slope * diabetes
-0.22 (18.16) .99
b
Level
15.38 (5.50) <.01
b
Slope
1.77 (1.15) .12
b
Level * age
-0.08 (0.30) .78
b
Level * education
0.86 (0.33) .01
b
Level * height
0.09 (0.17) .57
b
Level * smoking
-0.08 (3.31) .98
b
Level * cardio
1.25 (2.63) .63
b
Level * diabetes
0.86 (3.04) .78
b
Slope * age
-0.09 (0.08) .23
b
Slope * education
-0.13 (0.07) .08
b
Slope * height

-0.02 (0.04) .64
 b
 Slope * smoking
 -0.07 (0.72) .92
 b
 Slope * cardio
 -0.49 (1.10) .66
 b
 Slope * diabetes
 0.82 (0.88) .35
 a
 Var (Level)
 12861.00 (7065.11) .07
 a
 Var (Slope)
 176.62 (314.29) .57
 a
 Var (Residual)
 3460.22 (747.13) <.01
 b
 Var (Level)
 28.36 (13.93) .04
 b
 Var (Slope)
 0.38 (0.55) .50
 b
 Var (Residual)
 13.52 (2.34) <.01
 a
 Covar (Level, Slope)
 -918.32 (1230.92) .46
 b
 Covar (Level, Slope)
 -1.25 (2.61) .63

Correlation of Levels

-0.199

Correlation of Slopes

0.671

Correlation of Residuals

0.079

N

72

occasions

7

parameters

41

LL

-2,375

AIC

4,833

BIC

4,926

mmse

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

process

label

aeplus

ab

Covar (Levels)

3.42 (39.86) .93

ab

Covar (Slopes)

1.42 (2.61) .59
 ab
 Covar (Residuals)
 6.43 (8.88) .47
 er
 Corr (Levels)
 0.05 (0.62) .93
 er
 Corr (Slopes)
 0.90 (1.11) .42
 er
 Corr (Residuals)
 0.13 (0.19) .47
 a
 Level
 452.80 (113.83) <.01
 a
 Slope
 -33.81 (30.08) .26
 a
 Level * age
 -5.17 (6.51) .43
 a
 Level * education
 5.14 (10.16) .61
 a
 Level * height
 2.46 (3.41) .47
 a
 Level * smoking
 -33.55 (80.02) .68
 a
 Level * cardio
 -27.24 (80.99) .74
 a
 Level * diabetes

-15.10 (65.94) .82

a

Slope * age

0.49 (1.76) .78

a

Slope * education

-0.23 (2.64) .93

a

Slope * height

0.54 (1.16) .64

a

Slope * smoking

8.16 (14.71) .58

a

Slope * cardio

1.41 (17.95) .94

a

Slope * diabetes

-0.09 (19.09) .99

b

Level

26.59 (0.70) <.01

b

Slope

-0.02 (0.31) .95

b

Level * age

-0.00 (0.04) .97

b

Level * education

0.07 (0.06) .24

b

Level * height

0.00 (0.03) .98

b

Level * smoking

-0.22 (0.42) .60
 b
 Level * cardio
 -0.03 (0.56) .95
 b
 Level * diabetes
 -0.04 (0.45) .92
 b
 Slope * age
 -0.00 (0.02) .84
 b
 Slope * education
 -0.00 (0.02) .90
 b
 Slope * height
 -0.00 (0.01) .93
 b
 Slope * smoking
 0.07 (0.14) .60
 b
 Slope * cardio
 0.02 (0.19) .90
 b
 Slope * diabetes
 0.01 (0.17) .94
 a
 Var (Level)
 13498.16 (7104.04) .06
 a
 Var (Slope)
 222.00 (310.45) .47
 a
 Var (Residual)
 3440.49 (552.54) <.01
 b
 Var (Level)

0.30 (0.42) .48

b

Var (Slope)

0.01 (0.03) .72

b

Var (Residual)

0.67 (0.13) <.01

a

Covar (Level, Slope)

-1146.23 (1383.22) .41

b

Covar (Level, Slope)

0.03 (0.11) .80

Correlation of Levels

0.054

Correlation of Slopes

0.906

Correlation of Residuals

0.134

N

72

occasions

7

parameters

41

LL

-1,861

AIC

3,805

BIC

3,898

symbol

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

process

label

a

ae

aeH

aeHplus

full

ab

Covar (Levels)

202.38 (275.03) .46

254.31 (324.72) .43

22.35 (219.05) .92

6.90 (344.49) .98

-11.37 (340.76) .97

ab

Covar (Slopes)

2.17 (6.18) .72

11.27 (11.71) .34

-5.65 (15.36) .71

1.26 (13.53) .93

-4.70 (22.26) .83

ab

Covar (Residuals)

14.26 (33.02) .67

5.07 (40.65) .90

17.96 (55.65) .75

-23.96 (53.19) .65

16.72 (82.66) .84

er

Corr (Levels)

—

—

—

0.01 (0.36) .98

—

er

Corr (Slopes)

—

—

—

0.08 (0.85) .92

—

er

Corr (Residuals)

—

—

—

-0.08 (0.18) .66

—

a

Level

449.90 (33.34) <.01

439.83 (55.76) <.01

407.42 (64.29) <.01

457.18 (97.64) <.01

464.53 (143.13) <.01

a

Slope

-14.85 (9.59) .12

-12.82 (18.01) .48

-26.04 (33.48) .44

-34.05 (26.54) .20

-26.95 (47.63) .57

a

Level * age

-4.76 (3.32) .15

-4.45 (3.68) .23

-4.66 (4.87) .34

-5.51 (5.67) .33

-5.39 (5.87) .36

a

Level * education

—

0.40 (5.41) .94

6.08 (6.40) .34

4.83 (8.19) .56

5.15 (10.03) .61

a

Level * height

—

—

3.20 (2.81) .25

2.54 (3.58) .48

3.20 (3.90) .41

a

Level * smoking

—

—

—

-38.90 (76.04) .61

-35.26 (87.59) .69

a

Level * cardio

—

—

—

-20.74 (72.43) .78

-14.15 (84.51) .87

a

Level * diabetes

—

-16.69 (51.98) .75
-12.34 (59.41) .83

a

Slope * age

-0.24 (0.95) .80
-0.40 (1.19) .74
0.35 (2.02) .86
0.57 (1.70) .74
0.39 (2.67) .88

a

Slope * education

0.05 (1.41) .97
0.22 (2.00) .91
-0.13 (2.18) .95
0.17 (2.46) .94

a

Slope * height

-0.20 (1.07) .85
0.55 (1.15) .64
-0.11 (1.59) .95

a

Slope * smoking

10.46 (17.99) .56
2.26 (22.21) .92

a

Slope * cardio

-1.88 (24.54) .94
-4.20 (47.52) .93

a

Slope * diabetes

1.36 (15.23) .93
1.49 (26.15) .95

b

Level

39.50 (1.32) <.01
38.47 (1.48) <.01
39.17 (4.82) <.01
40.48 (9.13) <.01
40.53 (9.49) <.01

b

Slope

0.47 (0.34) .16
1.05 (0.67) .12
0.68 (1.62) .68
0.66 (2.08) .75
0.49 (2.27) .83

b

Level * age

-0.29 (0.14) .04
-0.26 (0.14) .06
-0.20 (0.32) .53
-0.18 (0.38) .64
-0.18 (0.39) .64

b

Level * education

-0.02 (0.08) .83
1.27 (0.58) .03

1.32 (0.81) .10

1.25 (0.74) .09

b

Level * height

—

—

0.09 (0.25) .73

0.10 (0.23) .67

0.09 (0.26) .73

b

Level * smoking

—

—

—

0.42 (5.41) .94

0.13 (5.51) .98

b

Level * cardio

—

—

—

-4.72 (5.51) .39

-4.51 (6.34) .48

b

Level * diabetes

—

—

—

-4.19 (4.86) .39

-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 (0.08) .82

-0.02 (0.10) .87
b
Slope * education

—
0.01 (0.08) .91
-0.14 (0.16) .39
-0.17 (0.18) .34
-0.14 (0.20) .50

b
Slope * height

—
—
0.01 (0.06) .84
0.01 (0.07) .88
0.01 (0.08) .86

b
Slope * smoking

—
—
—
-0.08 (0.98) .93
0.09 (1.10) .94

b
Slope * cardio

—
—
—
0.57 (1.62) .72
0.42 (1.71) .81

b
Slope * diabetes

—
—
—
0.19 (1.05) .86
0.14 (1.32) .91

a

Var (Level)

12660.93 (3253.44) <.01

11511.62 (3715.95) <.01

11004.88 (4343.89) .01

13294.09 (5899.23) .02

10422.16 (6299.55) .10

a

Var (Slope)

238.03 (126.63) .06

216.25 (303.90) .48

154.46 (356.16) .66

217.96 (300.61) .47

143.87 (587.66) .81

a

Var (Residual)

4727.66 (346.59) <.01

5679.66 (579.35) <.01

4601.12 (707.03) <.01

3478.41 (692.94) <.01

4614.54 (1247.23) <.01

b

Var (Level)

156.18 (16.60) <.01

147.53 (16.95) <.01

75.96 (27.20) <.01

69.21 (30.38) .02

69.55 (34.24) .04

b

Var (Slope)

1.44 (0.38) <.01

2.02 (0.88) .02

1.94 (1.40) .17

1.12 (0.96) .24

1.85 (1.81) .31

b

Var (Residual)

28.87 (1.38) <.01

28.37 (1.67) <.01

24.22 (3.16) <.01

25.64 (4.23) <.01

24.27 (4.44) <.01

a

Covar (Level, Slope)

-883.37 (461.78) .06

-693.83 (897.24) .44

-394.50 (907.27) .66

-1123.34 (1211.07) .35

-365.61 (1543.45) .81

b

Covar (Level, Slope)

-3.58 (2.42) .14

-2.40 (3.71) .52

-0.59 (4.64) .90

0.66 (4.91) .89

-0.09 (5.94) .99

Correlation of Levels

0.144

0.195

0.024

0.0072

-0.013

Correlation of Slopes

0.118

0.538

-0.327

0.0805

-0.288

Correlation of Residuals

0.039

0.013

0.054

-0.0802

0.050

N

377

377

72

72

72

occasions

9

5

6

7

6

parameters

21

25

29

41

45

LL

-6,302

-5,301

-2,420

-2,504

-2,416

AIC

12,646

10,651

4,898

5,090

4,922

BIC

12,728

10,750

4,964

5,183

5,024

trailsb

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

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to min; returning Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

Warning in FUN(newX[, i], ...): no non-missing arguments to max; returning -Inf

```

process
label
ae
aeh
full
ab
Covar (Levels)
-9.52 (1556.25) .99
956.14 (1283.00) .46
1129.70 (2255.92) .62
ab
Covar (Slopes)
20.77 (31.42) .51
11.70 (68.11) .86
20.02 (163.04) .90
ab
Covar (Residuals)
4.79 (289.00) .99
-267.66 (634.01) .67
-284.29 (1021.38) .78
er
Corr (Levels)
—
—
—
er
Corr (Slopes)
—
—
—
er
Corr (Residuals)
—
—
—
a

```

Level

449.46 (48.72) <.01

413.57 (61.67) <.01

467.80 (151.55) <.01

a

Slope

-16.65 (13.61) .22

-29.16 (30.96) .35

-29.38 (50.40) .56

a

Level * age

-4.54 (3.23) .16

-4.87 (5.25) .35

-5.54 (8.93) .54

a

Level * education

1.16 (5.44) .83

5.80 (6.35) .36

4.81 (8.00) .55

a

Level * height

—

3.09 (3.19) .33

3.10 (4.75) .52

a

Level * smoking

—

—

-35.41 (103.71) .73

a

Level * cardio

—

—

-18.28 (77.44) .81

a

Level * diabetes

0.61 (77.01) .99

a

Slope * age

-0.19 (0.88) .83

0.43 (2.02) .83

0.44 (3.12) .89

a

Slope * education

-0.01 (1.19) .99

0.40 (1.97) .84

0.38 (2.20) .86

a

Slope * height

-0.12 (1.03) .91

-0.07 (1.61) .97

a

Slope * smoking

3.21 (24.96) .90

a

Slope * cardio

-1.17 (24.21) .96

a

Slope * diabetes

-5.08 (33.70) .88

b

Level

131.50 (9.85) <.01

159.64 (30.56) <.01

160.29 (70.48) .02

b

Slope

2.26 (3.10) .47

-0.02 (9.19) .99

2.94 (17.25) .86

b

Level * age

1.90 (0.82) .02

1.11 (2.27) .62

1.09 (3.22) .74

b

Level * education

0.29 (0.37) .43

-6.50 (3.32) .05

-6.31 (5.10) .22

b

Level * height

—
-0.66 (1.39) .64

-0.57 (2.04) .78

b

Level * smoking

—
—
-3.09 (45.38) .95

b

Level * cardio

—
—
24.23 (34.58) .48

b

Level * diabetes

3.59 (25.26) .89

b

Slope * age

0.14 (0.20) .49

0.19 (0.57) .74

0.10 (0.74) .89

b

Slope * education

-0.18 (0.34) .60

0.30 (0.82) .71

0.17 (1.08) .88

b

Slope * height

—

0.42 (0.32) .19

0.38 (0.48) .43

b

Slope * smoking

—

—

-1.94 (11.21) .86

b

Slope * cardio

—

—

-9.06 (11.69) .44

b

Slope * diabetes

—

—

4.74 (7.00) .50

a

Var (Level)

12270.35 (3595.63) <.01

12393.75 (4933.39) .01

11597.20 (5921.83) .05

a

Var (Slope)

203.13 (111.33) .07

244.43 (352.12) .49

226.60 (632.86) .72

a

Var (Residual)

4774.16 (348.56) <.01

4309.09 (496.84) <.01

4301.06 (654.03) <.01

b

Var (Level)

3968.80 (636.03) <.01

1632.33 (733.60) .03

1526.70 (862.93) .08

b

Var (Slope)

35.32 (14.12) .01

34.69 (29.95) .25

13.39 (37.07) .72

b

Var (Residual)

1554.35 (56.69) <.01

1652.60 (158.73) <.01

1674.38 (205.62) <.01

a

Covar (Level, Slope)

-760.94 (503.61) .13

-812.64 (1069.79) .45

-695.74 (1812.17) .70

b

Covar (Level, Slope)

-147.56 (91.75) .11

-106.16 (171.63) .54

-67.38 (195.07) .73

Correlation of Levels

-0.0014

0.21

0.27

Correlation of Slopes

0.2452

0.13

0.36

Correlation of Residuals

0.0018

-0.10

-0.11

N

368

72

72

occasions

9

8

8

parameters

25

29

45

LL

-8,270

-3,279

-3,271

AIC

16,590
6,616
6,631

BIC
16,688
6,682
6,734

Summary

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

Computed correlations:

label

process_b

a

ae

aih

aihplus

full

Correlation of Levels

block

.

-0.13

-0.12

-0.15

.

Correlation of Levels

bnt

.

.

.

-0.10

.

Correlation of Levels

categories

.

.
 .
 -0.17
 .
 Correlation of Levels
 digit_tot
 -0.18
 -0.20
 -0.28
 .
 -0.23
 Correlation of Levels
 fas
 .
 .
 .
 -0.08
 .
 Correlation of Levels
 logic_tot
 .
 .
 .
 -0.20
 .
 Correlation of Levels
 mmse
 .
 .
 .
 0.05
 .
 Correlation of Levels
 symbol
 0.14
 0.20

0.02
 0.01
 -0.01
 Correlation of Levels
 trailsb
 .
 -0.00
 0.21
 .
 0.27
 label
 process__b
 a
 ae
 aeh
 aehplus
 full
 Correlation of Slopes
 block
 .
 -0.03
 -0.05
 0.13
 .
 Correlation of Slopes
 bnt
 .
 .
 .
 -0.15
 .
 Correlation of Slopes
 categories
 .
 .
 .

-0.11
 .
 Correlation of Slopes
 digit_tot
 -0.67
 -0.66
 -0.81
 .
 -0.94
 Correlation of Slopes
 fas
 .
 .
 .
 -0.66
 .
 Correlation of Slopes
 logic_tot
 .
 .
 .
 0.67
 .
 Correlation of Slopes
 mmse
 .
 .
 .
 0.91
 .
 Correlation of Slopes
 symbol
 0.12
 0.54
 -0.33
 0.08

-0.29

Correlation of Slopes

trailsb

.

0.25

0.13

.

0.36

label

process_b

a

ae

afh

afhplus

full

Correlation of Residuals

block

.

0.02

0.09

0.02

.

Correlation of Residuals

bnt

.

.

.

0.09

.

Correlation of Residuals

categories

.

.

.

0.05

.

Correlation of Residuals

digit_tot

0.14

0.14

0.21

.

0.20

Correlation of Residuals

fas

.

.

.

-0.00

.

Correlation of Residuals

logic_tot

.

.

.

0.08

.

Correlation of Residuals

mmse

.

.

.

0.13

.

Correlation of Residuals

symbol

0.04

0.01

0.05

-0.08

0.05

Correlation of Residuals

trailsb

.

0.00

-0.10

.

-0.11

P-values for corresponding covariances:

label

process_b

a

ae

ae_h

ae_hplus

full

Covariance of Levels

block

.

0.37

0.47

0.72

.

Covariance of Levels

bnt

.

.

.

0.83

.

Covariance of Levels

categories

.

.

.

0.64

.

Covariance of Levels

digit_tot
 0.38
 0.34
 0.35
 .
 0.57
 Covariance of Levels
 fas
 .
 .
 .
 0.85
 .
 Covariance of Levels
 logic_tot
 .
 .
 .
 0.54
 .
 Covariance of Levels
 mmse
 .
 .
 .
 0.93
 .
 Covariance of Levels
 symbol
 0.46
 0.43
 0.92
 0.98
 0.97
 Covariance of Levels
 trailsb

.
 0.99
 0.46
 .
 0.62
 label
 process_b
 a
 ae
 aeh
 aehplus
 full
 Covariance of Slopes
 block
 .
 0.96
 0.99
 0.98
 .
 Covariance of Slopes
 bnt
 .
 .
 .
 0.92
 .
 Covariance of Slopes
 categories
 .
 .
 .
 0.92
 .
 Covariance of Slopes
 digit_tot
 0.42

0.44
 0.22
 .
 0.43
 Covariance of Slopes
 fas
 .
 .
 .
 0.75
 .
 Covariance of Slopes
 logic_tot
 .
 .
 .
 0.48
 .
 Covariance of Slopes
 mmse
 .
 .
 .
 0.59
 .
 Covariance of Slopes
 symbol
 0.72
 0.34
 0.71
 0.93
 0.83
 Covariance of Slopes
 trailsb
 .
 0.51

0.86
 .
 0.90
 label
 process_b
 a
 ae
 aeh
 aehplus
 full
 Covariance of Residuals
 block
 .
 0.76
 0.45
 0.89
 .
 Covariance of Residuals
 bnt
 .
 .
 .
 0.73
 .
 Covariance of Residuals
 categories
 .
 .
 .
 0.77
 .
 Covariance of Residuals
 digit_tot
 0.06
 0.07
 0.14

.
 0.31
 Covariance of Residuals
 fas
 .
 .
 .
 0.99
 .
 Covariance of Residuals
 logic_tot
 .
 .
 .
 0.64
 .
 Covariance of Residuals
 mmse
 .
 .
 .
 0.47
 .
 Covariance of Residuals
 symbol
 0.67
 0.90
 0.75
 0.65
 0.84
 Covariance of Residuals
 trailsb
 .
 0.99
 0.67
 .

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_U

[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 IalsaSynthesis_0.1.8.9000 MplusAutomation_0.6-4

[5] magrittr_1.5

loaded via a namespace (and not attached):

[1] Rcpp_0.12.7 formatR_1.4 plyr_1.8.4 highr_0.6 tools_3.3.1 boot_1.3-18

[7] digest_0.6.10 evaluate_0.10 tibble_1.2 gtable_0.2.0 lattice_0.20-34 texreg_1.36.7

[13] DBI_0.5-1 yaml_2.1.13 proto_0.3-10 coda_0.18-1 dplyr_0.5.0 stringr_1.1.0

[19] htmlwidgets_0.7 grid_3.3.1 DT_0.2 R6_2.2.0 gsubfn_0.6-6 rmarkdown_1.1

[25] pander_0.6.0 tidyr_0.6.0 readr_1.0.0 scales_0.4.0 htmltools_0.3.5 rsconnect_0.5

[31] assertthat_0.1 testit_0.5 xtable_1.8-2 colorspace_1.2-7 stringi_1.1.2 lazyeval_0.2.

[37] munsell_0.4.3