Results tables

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This report prints the restuls tables from estimated models

Relies on the previous execution of the following scripts: - ./reports/report-governor - ./models/../compile-models.R - ./models/../compile-tables.R

# prepared by Ellis Island and ./reports/report-governor.R  
dto <- readRDS("./data/unshared/derived/dto\_h.rds")  
  
# prepared by ../compile-models.R  
models\_pooled <- readRDS("./data/shared/derived/models/models\_pooled.rds")# glm objects  
subset\_pooled <- readRDS("./data/shared/derived/models/subset\_pooled.rds")# glmulti objects  
  
models\_local <- readRDS("./data/shared/derived/models/models\_local.rds")  
subset\_local <- readRDS("./data/shared/derived/models/subset\_local.rds")  
  
# prepared by ../compile-tables.R  
tables\_pooled <- readRDS("./data/shared/derived/tables/tables\_pooled.rds")  
tables\_local <- readRDS("./data/shared/derived/tables/tables\_local.rds")  
tables\_bw\_pooled <- readRDS("./data/shared/derived/tables/tables\_bw\_pooled.rds")  
tables\_bw\_local <- readRDS("./data/shared/derived/tables/tables\_bw\_local.rds")  
  
ds\_within <- readRDS("./data/shared/derived/tables/ds\_within.rds")  
ds\_between <- readRDS("./data/shared/derived/tables/ds\_between.rds")

# Guide to Models

Each of the following models (A, B, AA, and BB) are fitted to the data from each study separately. When fitted to the pooled data, an additional predictor, study\_name is added after the intercept.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| predictors/model | A | B | AA | BB | best |
| age | age\_in\_years\_70 | age\_in\_years\_70 | age\_in\_years\_70 | age\_in\_years\_70 | ? |
| sex | female | female | female | female | ? |
| education | educ3 | educ3 | educ3 | educ3 | ? |
| marital status | single | single | single | single | ? |
| health |  | poor\_health |  | poor\_health | ? |
| physical activity |  | sedentary |  | sedentary | ? |
| employment |  | current\_work |  | current\_work | ? |
| alcohol use |  | current\_drink\_2 |  | current\_drink\_2 | ? |
| INTERACTIONS | *NONE* | *NONE* | *ALL PAIRWISE* | *ALL PAIRWISE* | ? |

Odds-ratios with 95% confidence intervals are reported. The model labeled "best" represents the solution suggested by the top ranked model from the best subset search propelled by genetic algorithm with AICC as the guiding selection criteria.

# Dynamic tables

## Between models

The following table reports comparison across five model types (A, B, AA, BB, best) and six datasets (alsa, lbsl, satsa, share, tilda, pooled). You can think of this as multiple tables stacked on top of each other. You select a single table by choosing the value for study\_name. (you may need to adjust the number of entries to view, at the top left of the dynamic table)

## Within models

The following table reports estimates and odds from every model that has been fit during the exercise. You can think of this as multiple tables of various heights stacked on top of each other. You select a single table by chosing the values for study\_name and model\_type. (you may need to adjust the number of entries to view, at the top left of the dynamic table)

# Static tables

## pooled

### BETWEEN

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| coef\_name | A | B | AA | BB | best |
| (Intercept) | .16(.14,.19)\*\*\* | .1(.08,.12)\*\*\* | .16(.13,.19)\*\*\* | .11(.08,.16)\*\*\* | .12(.08,.19)\*\*\* |
| study\_name\_f(LBLS) | .86(.63,1.15) | .93(.68,1.26) | .99(.72,1.35) | 1.06(.76,1.45) | .75(.3,1.8) |
| study\_name\_f(SATSA) | 1.32(1.05,1.65)\* | 1.24(.98,1.55). | 1.47(1.17,1.86)\*\* | 1.26(.99,1.61). | .56(.24,1.26) |
| study\_name\_f(SHARE) | .91(.75,1.11) | 1.14(.93,1.41) | 1.04(.84,1.28) | 1.2(.96,1.51) | 1.33(.77,2.31) |
| study\_name\_f(TILDA) | .85(.71,1.03). | .97(.8,1.18) | .95(.78,1.17) | 1.03(.83,1.27) | .61(.36,1.04). |
| age\_in\_years\_70 | .96(.96,.97)\*\*\* | .96(.95,.96)\*\*\* | .97(.96,.99)\*\*\* | .97(.96,.99)\*\* | .96(.93,.98)\*\*\* |
| femaleTRUE | .81(.73,.89)\*\*\* | .81(.73,.9)\*\*\* | .77(.62,.94)\* | .78(.59,1.03). | .67(.49,.92)\* |
| educ3\_f( < HS ) | 1.22(1.08,1.37)\*\*\* | 1.18(1.05,1.32)\*\* | 1.14(.94,1.38) | .97(.72,1.31) | 1.28(.8,2.03) |
| educ3\_f( HS < ) | .77(.66,.91)\*\* | .8(.68,.93)\*\* | .77(.6,.99)\* | .87(.59,1.28) | .94(.61,1.46) |
| singleTRUE | 1.48(1.33,1.65)\*\*\* | 1.49(1.33,1.66)\*\*\* | 1.4(1.1,1.78)\*\* | 1.35(.97,1.87). | 1.4(1,1.95)\* |
| poor\_healthTRUE |  | 1.26(1.13,1.4)\*\*\* |  | 1.29(.95,1.74). | 1.35(.92,1.96) |
| sedentaryTRUE |  | 1.45(1.29,1.62)\*\*\* |  | 1.4(1.02,1.92)\* | 1.28(.94,1.75) |
| current\_work\_2TRUE |  | .71(.63,.81)\*\*\* |  | .82(.56,1.2) | 2.25(.8,5.41). |
| current\_drinkTRUE |  | 1.53(1.36,1.71)\*\*\* |  | 1.26(.96,1.67). | 1.35(.94,1.96) |
| age\_in\_years\_70:femaleTRUE |  |  | .98(.97,.99)\*\*\* | .99(.98,1)\* | .98(.97,.99)\*\*\* |
| age\_in\_years\_70:educ3\_f( < HS ) |  |  | 1(.99,1.01) | 1(.98,1.01) |  |
| age\_in\_years\_70:educ3\_f( HS < ) |  |  | 1.02(1.01,1.04)\*\* | 1.02(1,1.03) |  |
| age\_in\_years\_70:singleTRUE |  |  | .99(.98,1)\* | .99(.98,1) |  |
| age\_in\_years\_70:poor\_healthTRUE |  |  |  | 1(.99,1.01) |  |
| age\_in\_years\_70:sedentaryTRUE |  |  |  | 1(.98,1.01) |  |
| age\_in\_years\_70:current\_work\_2TRUE |  |  |  | 1.01(.99,1.02) |  |
| age\_in\_years\_70:current\_drinkTRUE |  |  |  | .99(.98,1). |  |
| femaleTRUE:educ3\_f( < HS ) |  |  | .96(.77,1.21) | .98(.78,1.24) |  |
| femaleTRUE:educ3\_f( HS < ) |  |  | 1.2(.87,1.65) | 1.18(.85,1.63) |  |
| femaleTRUE:singleTRUE |  |  | .85(.68,1.06) | .9(.72,1.13) |  |
| femaleTRUE:poor\_healthTRUE |  |  |  | 1.06(.85,1.33) |  |
| femaleTRUE:sedentaryTRUE |  |  |  | .84(.67,1.05) |  |
| femaleTRUE:current\_work\_2TRUE |  |  |  | 1.19(.91,1.54) |  |
| femaleTRUE:current\_drinkTRUE |  |  |  | .95(.76,1.18) |  |
| educ3\_f( < HS ):singleTRUE |  |  | 1.23(.95,1.58) | 1.26(.97,1.63). |  |
| educ3\_f( HS < ):singleTRUE |  |  | 1(.71,1.41) | .99(.7,1.41) |  |
| educ3\_f( < HS ):poor\_healthTRUE |  |  |  | 1.33(1.03,1.71)\* | 1.29(.98,1.69). |
| educ3\_f( HS < ):poor\_healthTRUE |  |  |  | .86(.61,1.22) | .87(.59,1.26) |
| educ3\_f( < HS ):sedentaryTRUE |  |  |  | 1.16(.9,1.51) |  |
| educ3\_f( HS < ):sedentaryTRUE |  |  |  | 1.05(.73,1.49) |  |
| educ3\_f( < HS ):current\_work\_2TRUE |  |  |  | .88(.67,1.17) | .89(.68,1.15) |
| educ3\_f( HS < ):current\_work\_2TRUE |  |  |  | .82(.54,1.25) | .63(.42,.94)\* |
| educ3\_f( < HS ):current\_drinkTRUE |  |  |  | 1.01(.79,1.3) | .77(.59,1.02). |
| educ3\_f( HS < ):current\_drinkTRUE |  |  |  | .99(.71,1.38) | 1.23(.85,1.79) |
| singleTRUE:poor\_healthTRUE |  |  |  | .83(.65,1.05) | .83(.66,1.05) |
| singleTRUE:sedentaryTRUE |  |  |  | .89(.69,1.14) |  |
| singleTRUE:current\_work\_2TRUE |  |  |  | .92(.69,1.23) |  |
| singleTRUE:current\_drinkTRUE |  |  |  | 1.24(.98,1.58). |  |
| poor\_healthTRUE:sedentaryTRUE |  |  |  | .76(.6,.96)\* | .76(.59,.96)\* |
| poor\_healthTRUE:current\_work\_2TRUE |  |  |  | .82(.62,1.09) | .81(.63,1.05) |
| poor\_healthTRUE:current\_drinkTRUE |  |  |  | 1.03(.83,1.3) |  |
| sedentaryTRUE:current\_work\_2TRUE |  |  |  | 1.15(.86,1.53) |  |
| sedentaryTRUE:current\_drinkTRUE |  |  |  | 1.2(.95,1.51) |  |
| current\_work\_2TRUE:current\_drinkTRUE |  |  |  | .99(.76,1.31) |  |

### A

solution of model **A** fit to combined and harmonized data from **ALL** studies

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -5326.851 | 10653.7 | 10673.7 | 10747.9 | 12327 | 12318 | 9 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .16 | (.14,.19) | -1.82 | .09 | 0.0000 | <=.001 |
|  | study\_name\_f(LBLS) | .86 | (.63,1.15) | -.16 | .16 | 0.3147 | > .10 |
| \* | study\_name\_f(SATSA) | 1.32 | (1.05,1.65) | .28 | .11 | 0.0162 | <=.05 |
|  | study\_name\_f(SHARE) | .85 | (.69,1.04) | -.17 | .1 | 0.1029 | > .10 |
| . | study\_name\_f(TILDA) | .85 | (.71,1.03) | -.16 | .1 | 0.0979 | <=.10 |
| \*\*\* | age\_in\_years\_70 | .96 | (.96,.97) | -.04 | 0 | 0.0000 | <=.001 |
| \*\*\* | femaleTRUE | .81 | (.73,.89) | -.21 | .05 | 0.0000 | <=.001 |
| \*\*\* | educ3\_f( < HS ) | 1.22 | (1.08,1.37) | .2 | .06 | 0.0010 | <=.001 |
| \*\* | educ3\_f( HS < ) | .77 | (.66,.91) | -.26 | .08 | 0.0019 | <=.01 |
| \*\*\* | singleTRUE | 1.48 | (1.33,1.65) | .39 | .06 | 0.0000 | <=.001 |

### B

solution of model **B** fit to combined and harmonized data from **ALL** studies

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -5258.86 | 10517.72 | 10545.7 | 10649.6 | 12327 | 12314 | 13 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .1 | (.08,.12) | -2.29 | .11 | 0.0000 | <=.001 |
|  | study\_name\_f(LBLS) | .93 | (.68,1.26) | -.07 | .16 | 0.6513 | > .10 |
| . | study\_name\_f(SATSA) | 1.24 | (.98,1.55) | .21 | .12 | 0.0687 | <=.10 |
|  | study\_name\_f(SHARE) | 1.04 | (.85,1.29) | .04 | .11 | 0.6868 | > .10 |
|  | study\_name\_f(TILDA) | .97 | (.8,1.18) | -.03 | .1 | 0.7660 | > .10 |
| \*\*\* | age\_in\_years\_70 | .96 | (.95,.96) | -.05 | 0 | 0.0000 | <=.001 |
| \*\*\* | femaleTRUE | .81 | (.73,.9) | -.21 | .05 | 0.0000 | <=.001 |
| \*\* | educ3\_f( < HS ) | 1.18 | (1.05,1.32) | .16 | .06 | 0.0068 | <=.01 |
| \*\* | educ3\_f( HS < ) | .8 | (.68,.93) | -.23 | .08 | 0.0054 | <=.01 |
| \*\*\* | singleTRUE | 1.49 | (1.33,1.66) | .4 | .06 | 0.0000 | <=.001 |
| \*\*\* | poor\_healthTRUE | 1.26 | (1.13,1.4) | .23 | .06 | 0.0000 | <=.001 |
| \*\*\* | sedentaryTRUE | 1.45 | (1.29,1.62) | .37 | .06 | 0.0000 | <=.001 |
| \*\*\* | current\_work\_2TRUE | .71 | (.63,.81) | -.34 | .06 | 0.0000 | <=.001 |
| \*\*\* | current\_drinkTRUE | 1.53 | (1.36,1.71) | .42 | .06 | 0.0000 | <=.001 |

### AA

solution of model **AA** fit to combined and harmonized data from **ALL** studies

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -5308.01 | 10616.02 | 10654 | 10795 | 12327 | 12309 | 18 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .16 | (.13,.19) | -1.85 | .1 | 0.0000 | <=.001 |
|  | study\_name\_f(LBLS) | .98 | (.72,1.34) | -.02 | .16 | 0.9165 | > .10 |
| \*\* | study\_name\_f(SATSA) | 1.48 | (1.17,1.87) | .39 | .12 | 0.0011 | <=.01 |
|  | study\_name\_f(SHARE) | .97 | (.78,1.2) | -.03 | .11 | 0.7592 | > .10 |
|  | study\_name\_f(TILDA) | .95 | (.78,1.17) | -.05 | .1 | 0.6355 | > .10 |
| \*\*\* | age\_in\_years\_70 | .97 | (.96,.98) | -.03 | .01 | 0.0000 | <=.001 |
| \*\* | femaleTRUE | .76 | (.61,.93) | -.28 | .11 | 0.0085 | <=.01 |
|  | educ3\_f( < HS ) | 1.13 | (.93,1.38) | .13 | .1 | 0.2101 | > .10 |
| . | educ3\_f( HS < ) | .79 | (.61,1.01) | -.24 | .13 | 0.0573 | <=.10 |
| \*\* | singleTRUE | 1.4 | (1.09,1.78) | .34 | .12 | 0.0068 | <=.01 |
| \*\*\* | age\_in\_years\_70:femaleTRUE | .98 | (.97,.99) | -.02 | 0 | 0.0003 | <=.001 |
|  | age\_in\_years\_70:educ3\_f( < HS ) | 1 | (.99,1.01) | 0 | .01 | 0.5561 | > .10 |
| \*\* | age\_in\_years\_70:educ3\_f( HS < ) | 1.02 | (1.01,1.03) | .02 | .01 | 0.0055 | <=.01 |
| \* | age\_in\_years\_70:singleTRUE | .99 | (.98,1) | -.01 | 0 | 0.0492 | <=.05 |
|  | femaleTRUE:educ3\_f( < HS ) | .97 | (.77,1.21) | -.03 | .11 | 0.7734 | > .10 |
|  | femaleTRUE:educ3\_f( HS < ) | 1.19 | (.87,1.64) | .17 | .16 | 0.2837 | > .10 |
|  | femaleTRUE:singleTRUE | .85 | (.68,1.06) | -.16 | .11 | 0.1525 | > .10 |
|  | educ3\_f( < HS ):singleTRUE | 1.23 | (.95,1.58) | .2 | .13 | 0.1111 | > .10 |
|  | educ3\_f( HS < ):singleTRUE | 1 | (.7,1.41) | 0 | .18 | 0.9885 | > .10 |

### BB

solution of model **BB** fit to combined and harmonized data from **ALL** studies

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -5221.406 | 10442.81 | 10540.8 | 10904.4 | 12327 | 12279 | 48 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .11 | (.08,.16) | -2.17 | .17 | 0.0000 | <=.001 |
|  | study\_name\_f(LBLS) | 1.05 | (.76,1.43) | .04 | .16 | 0.7829 | > .10 |
| . | study\_name\_f(SATSA) | 1.26 | (.99,1.61) | .23 | .13 | 0.0659 | <=.10 |
|  | study\_name\_f(SHARE) | 1.1 | (.88,1.39) | .1 | .12 | 0.4007 | > .10 |
|  | study\_name\_f(TILDA) | 1.03 | (.83,1.27) | .03 | .11 | 0.8043 | > .10 |
| \*\*\* | age\_in\_years\_70 | .97 | (.95,.99) | -.03 | .01 | 0.0007 | <=.001 |
| . | femaleTRUE | .77 | (.58,1.01) | -.26 | .14 | 0.0610 | <=.10 |
|  | educ3\_f( < HS ) | .97 | (.72,1.31) | -.03 | .15 | 0.8408 | > .10 |
|  | educ3\_f( HS < ) | .89 | (.61,1.31) | -.11 | .2 | 0.5667 | > .10 |
| . | singleTRUE | 1.35 | (.97,1.86) | .3 | .17 | 0.0746 | <=.10 |
| . | poor\_healthTRUE | 1.3 | (.96,1.75) | .26 | .15 | 0.0882 | <=.10 |
| \* | sedentaryTRUE | 1.4 | (1.01,1.92) | .33 | .16 | 0.0408 | <=.05 |
|  | current\_work\_2TRUE | .82 | (.56,1.2) | -.2 | .2 | 0.3020 | > .10 |
|  | current\_drinkTRUE | 1.25 | (.95,1.65) | .22 | .14 | 0.1184 | > .10 |
| \* | age\_in\_years\_70:femaleTRUE | .99 | (.98,1) | -.01 | .01 | 0.0245 | <=.05 |
|  | age\_in\_years\_70:educ3\_f( < HS ) | 1 | (.98,1.01) | 0 | .01 | 0.5821 | > .10 |
|  | age\_in\_years\_70:educ3\_f( HS < ) | 1.01 | (1,1.03) | .01 | .01 | 0.1425 | > .10 |
|  | age\_in\_years\_70:singleTRUE | .99 | (.98,1.01) | -.01 | .01 | 0.2926 | > .10 |
|  | age\_in\_years\_70:poor\_healthTRUE | 1 | (.99,1.01) | 0 | .01 | 0.6316 | > .10 |
|  | age\_in\_years\_70:sedentaryTRUE | 1 | (.98,1.01) | 0 | .01 | 0.5225 | > .10 |
|  | age\_in\_years\_70:current\_work\_2TRUE | 1.01 | (.99,1.02) | .01 | .01 | 0.3672 | > .10 |
| . | age\_in\_years\_70:current\_drinkTRUE | .99 | (.98,1) | -.01 | .01 | 0.0899 | <=.10 |
|  | femaleTRUE:educ3\_f( < HS ) | .99 | (.78,1.24) | -.01 | .12 | 0.9049 | > .10 |
|  | femaleTRUE:educ3\_f( HS < ) | 1.17 | (.85,1.61) | .16 | .16 | 0.3414 | > .10 |
|  | femaleTRUE:singleTRUE | .9 | (.72,1.13) | -.1 | .12 | 0.3702 | > .10 |
|  | femaleTRUE:poor\_healthTRUE | 1.06 | (.85,1.33) | .06 | .11 | 0.5916 | > .10 |
|  | femaleTRUE:sedentaryTRUE | .84 | (.67,1.05) | -.17 | .11 | 0.1330 | > .10 |
|  | femaleTRUE:current\_work\_2TRUE | 1.19 | (.91,1.54) | .17 | .13 | 0.1983 | > .10 |
|  | femaleTRUE:current\_drinkTRUE | .95 | (.77,1.18) | -.05 | .11 | 0.6647 | > .10 |
| . | educ3\_f( < HS ):singleTRUE | 1.26 | (.97,1.63) | .23 | .13 | 0.0817 | <=.10 |
|  | educ3\_f( HS < ):singleTRUE | .99 | (.7,1.4) | -.01 | .18 | 0.9501 | > .10 |
| \* | educ3\_f( < HS ):poor\_healthTRUE | 1.33 | (1.03,1.71) | .28 | .13 | 0.0279 | <=.05 |
|  | educ3\_f( HS < ):poor\_healthTRUE | .86 | (.61,1.22) | -.15 | .18 | 0.4105 | > .10 |
|  | educ3\_f( < HS ):sedentaryTRUE | 1.17 | (.9,1.51) | .15 | .13 | 0.2488 | > .10 |
|  | educ3\_f( HS < ):sedentaryTRUE | 1.05 | (.73,1.49) | .05 | .18 | 0.7971 | > .10 |
|  | educ3\_f( < HS ):current\_work\_2TRUE | .89 | (.67,1.17) | -.12 | .14 | 0.3982 | > .10 |
|  | educ3\_f( HS < ):current\_work\_2TRUE | .81 | (.53,1.23) | -.21 | .22 | 0.3220 | > .10 |
|  | educ3\_f( < HS ):current\_drinkTRUE | 1.02 | (.8,1.3) | .02 | .13 | 0.8742 | > .10 |
|  | educ3\_f( HS < ):current\_drinkTRUE | .98 | (.71,1.37) | -.02 | .17 | 0.9217 | > .10 |
|  | singleTRUE:poor\_healthTRUE | .82 | (.65,1.04) | -.2 | .12 | 0.1022 | > .10 |
|  | singleTRUE:sedentaryTRUE | .89 | (.69,1.14) | -.12 | .13 | 0.3496 | > .10 |
|  | singleTRUE:current\_work\_2TRUE | .93 | (.7,1.25) | -.07 | .15 | 0.6386 | > .10 |
| . | singleTRUE:current\_drinkTRUE | 1.25 | (.99,1.59) | .22 | .12 | 0.0672 | <=.10 |
| \* | poor\_healthTRUE:sedentaryTRUE | .76 | (.6,.96) | -.28 | .12 | 0.0200 | <=.05 |
|  | poor\_healthTRUE:current\_work\_2TRUE | .83 | (.63,1.11) | -.18 | .15 | 0.2173 | > .10 |
|  | poor\_healthTRUE:current\_drinkTRUE | 1.03 | (.82,1.29) | .03 | .11 | 0.7887 | > .10 |
|  | sedentaryTRUE:current\_work\_2TRUE | 1.15 | (.86,1.53) | .14 | .15 | 0.3333 | > .10 |
|  | sedentaryTRUE:current\_drinkTRUE | 1.2 | (.96,1.52) | .19 | .12 | 0.1158 | > .10 |
|  | current\_work\_2TRUE:current\_drinkTRUE | .99 | (.75,1.3) | -.01 | .14 | 0.9172 | > .10 |

### best

solution of model **best** fit to combined and harmonized data from **ALL** studies

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -5143.964 | 10287.93 | 10407.9 | 10853.1 | 12327 | 12268 | 59 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .12 | (.08,.19) | -2.1 | .24 | 0.0000 | <=.001 |
|  | study\_name\_f(LBLS) | .75 | (.3,1.8) | -.29 | .45 | 0.5297 | > .10 |
|  | study\_name\_f(SATSA) | .56 | (.24,1.26) | -.58 | .42 | 0.1644 | > .10 |
|  | study\_name\_f(SHARE) | 1.36 | (.79,2.37) | .31 | .28 | 0.2682 | > .10 |
| . | study\_name\_f(TILDA) | .61 | (.36,1.04) | -.5 | .27 | 0.0647 | <=.10 |
|  | educ3\_f( < HS ) | 1.28 | (.8,2.03) | .25 | .24 | 0.2933 | > .10 |
|  | educ3\_f( HS < ) | .94 | (.61,1.46) | -.06 | .22 | 0.7940 | > .10 |
| \*\*\* | age\_in\_years\_70 | .96 | (.93,.98) | -.04 | .01 | 0.0008 | <=.001 |
| \* | femaleTRUE | .67 | (.49,.92) | -.39 | .16 | 0.0141 | <=.05 |
| \* | singleTRUE | 1.4 | (1,1.95) | .34 | .17 | 0.0486 | <=.05 |
|  | poor\_healthTRUE | 1.35 | (.92,1.96) | .3 | .19 | 0.1241 | > .10 |
|  | sedentaryTRUE | 1.28 | (.94,1.75) | .25 | .16 | 0.1169 | > .10 |
| . | current\_work\_2TRUE | 2.25 | (.8,5.41) | .81 | .48 | 0.0905 | <=.10 |
|  | current\_drinkTRUE | 1.35 | (.94,1.96) | .3 | .19 | 0.1113 | > .10 |
|  | study\_name\_f(LBLS):educ3\_f( < HS ) | 1.33 | (.5,3.46) | .29 | .49 | 0.5555 | > .10 |
|  | study\_name\_f(SATSA):educ3\_f( < HS ) | 1.16 | (.6,2.31) | .15 | .34 | 0.6570 | > .10 |
|  | study\_name\_f(SHARE):educ3\_f( < HS ) | .81 | (.5,1.35) | -.21 | .25 | 0.4194 | > .10 |
|  | study\_name\_f(TILDA):educ3\_f( < HS ) | 1.12 | (.71,1.77) | .11 | .23 | 0.6326 | > .10 |
|  | study\_name\_f(LBLS):educ3\_f( HS < ) | 1.11 | (.54,2.32) | .1 | .37 | 0.7807 | > .10 |
|  | study\_name\_f(SATSA):educ3\_f( HS < ) | 1.29 | (.58,2.87) | .26 | .41 | 0.5244 | > .10 |
|  | study\_name\_f(SHARE):educ3\_f( HS < ) | 1.08 | (.66,1.75) | .07 | .25 | 0.7619 | > .10 |
| \*\* | study\_name\_f(TILDA):educ3\_f( HS < ) | .47 | (.26,.81) | -.76 | .29 | 0.0079 | <=.01 |
| \*\*\* | age\_in\_years\_70:femaleTRUE | .98 | (.97,.99) | -.02 | .01 | 0.0001 | <=.001 |
|  | singleTRUE:poor\_healthTRUE | .83 | (.66,1.05) | -.18 | .12 | 0.1165 | > .10 |
| \* | poor\_healthTRUE:sedentaryTRUE | .76 | (.59,.96) | -.28 | .12 | 0.0220 | <=.05 |
|  | poor\_healthTRUE:current\_work\_2TRUE | .81 | (.63,1.05) | -.21 | .13 | 0.1209 | > .10 |
|  | study\_name\_f(LBLS):age\_in\_years\_70 | 1.02 | (.99,1.06) | .02 | .02 | 0.2339 | > .10 |
|  | study\_name\_f(SATSA):age\_in\_years\_70 | 1 | (.97,1.03) | 0 | .02 | 0.9971 | > .10 |
| \*\*\* | study\_name\_f(SHARE):age\_in\_years\_70 | 1.06 | (1.03,1.09) | .06 | .01 | 0.0001 | <=.001 |
|  | study\_name\_f(TILDA):age\_in\_years\_70 | 1 | (.97,1.02) | 0 | .01 | 0.7631 | > .10 |
| . | study\_name\_f(LBLS):femaleTRUE | 1.83 | (.95,3.53) | .6 | .33 | 0.0710 | <=.10 |
| \* | study\_name\_f(SATSA):femaleTRUE | .57 | (.37,.89) | -.56 | .23 | 0.0143 | <=.05 |
|  | study\_name\_f(SHARE):femaleTRUE | 1.39 | (.93,2.1) | .33 | .21 | 0.1121 | > .10 |
|  | study\_name\_f(TILDA):femaleTRUE | 1.13 | (.78,1.64) | .12 | .19 | 0.5270 | > .10 |
|  | study\_name\_f(LBLS):singleTRUE | 1.4 | (.74,2.66) | .34 | .32 | 0.2956 | > .10 |
|  | study\_name\_f(SATSA):singleTRUE | 1.27 | (.82,1.98) | .24 | .23 | 0.2921 | > .10 |
| . | study\_name\_f(SHARE):singleTRUE | .68 | (.44,1.05) | -.39 | .22 | 0.0803 | <=.10 |
| . | study\_name\_f(TILDA):singleTRUE | 1.4 | (.98,2.02) | .34 | .18 | 0.0674 | <=.10 |
|  | study\_name\_f(LBLS):poor\_healthTRUE | .7 | (.36,1.34) | -.35 | .33 | 0.2852 | > .10 |
|  | study\_name\_f(SATSA):poor\_healthTRUE | 1.02 | (.63,1.64) | .02 | .24 | 0.9382 | > .10 |
|  | study\_name\_f(SHARE):poor\_healthTRUE | .72 | (.48,1.08) | -.33 | .21 | 0.1078 | > .10 |
|  | study\_name\_f(TILDA):poor\_healthTRUE | 1.19 | (.8,1.77) | .17 | .2 | 0.3919 | > .10 |
| \*\* | study\_name\_f(LBLS):sedentaryTRUE | 2.82 | (1.39,5.64) | 1.04 | .36 | 0.0037 | <=.01 |
|  | study\_name\_f(SATSA):sedentaryTRUE | 1.37 | (.9,2.08) | .31 | .21 | 0.1402 | > .10 |
|  | study\_name\_f(SHARE):sedentaryTRUE | 1.08 | (.72,1.6) | .08 | .2 | 0.7107 | > .10 |
|  | study\_name\_f(TILDA):sedentaryTRUE | 1.34 | (.94,1.9) | .29 | .18 | 0.1021 | > .10 |
|  | study\_name\_f(LBLS):current\_work\_2TRUE | .56 | (.18,1.88) | -.58 | .59 | 0.3254 | > .10 |
| . | study\_name\_f(SATSA):current\_work\_2TRUE | .39 | (.15,1.15) | -.95 | .52 | 0.0658 | <=.10 |
|  | study\_name\_f(SHARE):current\_work\_2TRUE | .53 | (.22,1.51) | -.63 | .49 | 0.1961 | > .10 |
| \* | study\_name\_f(TILDA):current\_work\_2TRUE | .33 | (.13,.92) | -1.11 | .48 | 0.0211 | <=.05 |
| \* | study\_name\_f(LBLS):current\_drinkTRUE | .44 | (.23,.85) | -.82 | .33 | 0.0135 | <=.05 |
| \*\*\* | study\_name\_f(SATSA):current\_drinkTRUE | 2.59 | (1.55,4.35) | .95 | .26 | 0.0003 | <=.001 |
|  | study\_name\_f(SHARE):current\_drinkTRUE | 1.12 | (.75,1.67) | .11 | .21 | 0.5790 | > .10 |
|  | study\_name\_f(TILDA):current\_drinkTRUE | 1.19 | (.8,1.77) | .18 | .2 | 0.3901 | > .10 |
| . | educ3\_f( < HS ):poor\_healthTRUE | 1.29 | (.98,1.69) | .25 | .14 | 0.0654 | <=.10 |
|  | educ3\_f( HS < ):poor\_healthTRUE | .87 | (.59,1.26) | -.14 | .19 | 0.4600 | > .10 |
|  | educ3\_f( < HS ):current\_work\_2TRUE | .89 | (.68,1.15) | -.12 | .13 | 0.3639 | > .10 |
| \* | educ3\_f( HS < ):current\_work\_2TRUE | .63 | (.42,.94) | -.46 | .21 | 0.0239 | <=.05 |
| . | educ3\_f( < HS ):current\_drinkTRUE | .77 | (.59,1.02) | -.26 | .14 | 0.0680 | <=.10 |
|  | educ3\_f( HS < ):current\_drinkTRUE | 1.23 | (.85,1.79) | .21 | .19 | 0.2805 | > .10 |

## alsa

### BETWEEN

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| coef\_name | A | B | AA | BB | best |
| (Intercept) | .19(.14,.26)\*\*\* | .14(.09,.21)\*\*\* | .15(.09,.24)\*\*\* | .18(.07,.42)\*\*\* | .14(.13,.15)\*\*\* |
| age\_in\_years\_70 | .95(.93,.97)\*\*\* | .95(.93,.97)\*\*\* | .98(.93,1.03) | .94(.87,1.01) | .98(.97,.99)\*\*\* |
| femaleTRUE | .57(.42,.76)\*\*\* | .6(.44,.81)\*\*\* | .96(.53,1.71) | .65(.28,1.56) |  |
| educ3\_f( < HS ) | 1.23(.81,1.84) | 1.22(.8,1.82) | 1.43(.64,3.1) | 1.44(.41,4.83) |  |
| educ3\_f( HS < ) | 1.06(.77,1.45) | 1.05(.76,1.44) | 1.16(.64,2.11) | 1.01(.42,2.43) |  |
| singleTRUE | 1.28(.92,1.77) | 1.3(.93,1.79) | 1.02(.45,2.19) | .69(.23,1.91) | 1.39(1.13,1.69)\*\* |
| poor\_healthTRUE |  | 1.12(.82,1.53) |  | 1.17(.48,2.83) |  |
| sedentaryTRUE |  | 1.16(.85,1.56) |  | .96(.38,2.35) |  |
| current\_work\_2TRUE |  | 1.75(.64,4.1) |  | 61.72(.52,19638.03) |  |
| current\_drinkTRUE |  | 1.38(1.01,1.92)\* |  | .7(.31,1.64) |  |
| age\_in\_years\_70:femaleTRUE |  |  | .92(.87,.98)\*\* | .92(.87,.98)\*\* | .99(.99,1). |
| age\_in\_years\_70:educ3\_f( < HS ) |  |  | 1.02(.95,1.1) | 1(.93,1.08) |  |
| age\_in\_years\_70:educ3\_f( HS < ) |  |  | .98(.93,1.04) | .98(.92,1.04) |  |
| age\_in\_years\_70:singleTRUE |  |  | 1(.95,1.05) | 1.01(.95,1.07) |  |
| age\_in\_years\_70:poor\_healthTRUE |  |  |  | 1(.94,1.06) |  |
| age\_in\_years\_70:sedentaryTRUE |  |  |  | 1.01(.96,1.07) |  |
| age\_in\_years\_70:current\_work\_2TRUE |  |  |  | .75(.47,1.02) |  |
| age\_in\_years\_70:current\_drinkTRUE |  |  |  | 1.05(.99,1.12). | .98(.98,.99)\*\*\* |
| femaleTRUE:educ3\_f( < HS ) |  |  | .45(.16,1.18) | .31(.1,.89)\* |  |
| femaleTRUE:educ3\_f( HS < ) |  |  | .78(.39,1.53) | .72(.35,1.47) |  |
| femaleTRUE:singleTRUE |  |  | 1.7(.84,3.54) | 2.1(1,4.55). |  |
| femaleTRUE:poor\_healthTRUE |  |  |  | 1.36(.66,2.79) |  |
| femaleTRUE:sedentaryTRUE |  |  |  | 1.35(.67,2.76) |  |
| femaleTRUE:current\_work\_2TRUE |  |  |  | .14(0,4) |  |
| femaleTRUE:current\_drinkTRUE |  |  |  | 1.39(.66,2.92) |  |
| educ3\_f( < HS ):singleTRUE |  |  | .74(.28,1.93) | .88(.32,2.41) |  |
| educ3\_f( HS < ):singleTRUE |  |  | 1.37(.67,2.84) | 1.33(.63,2.86) |  |
| educ3\_f( < HS ):poor\_healthTRUE |  |  |  | .99(.4,2.46) |  |
| educ3\_f( HS < ):poor\_healthTRUE |  |  |  | .77(.37,1.57) |  |
| educ3\_f( < HS ):sedentaryTRUE |  |  |  | 2.71(1.11,6.82)\* |  |
| educ3\_f( HS < ):sedentaryTRUE |  |  |  | 1.1(.54,2.24) |  |
| educ3\_f( < HS ):current\_work\_2TRUE |  |  |  | 1.09(.03,37.99) |  |
| educ3\_f( HS < ):current\_work\_2TRUE |  |  |  | .46(.02,6.09) |  |
| educ3\_f( < HS ):current\_drinkTRUE |  |  |  | .67(.26,1.75) |  |
| educ3\_f( HS < ):current\_drinkTRUE |  |  |  | 1.38(.65,2.93) |  |
| singleTRUE:poor\_healthTRUE |  |  |  | 1.1(.53,2.28) |  |
| singleTRUE:sedentaryTRUE |  |  |  | .63(.3,1.28) |  |
| singleTRUE:current\_work\_2TRUE |  |  |  | 2.3(.17,38.18) |  |
| singleTRUE:current\_drinkTRUE |  |  |  | 1.63(.76,3.59) | 1.52(1.26,1.83)\*\*\* |
| poor\_healthTRUE:sedentaryTRUE |  |  |  | .72(.37,1.42) |  |
| poor\_healthTRUE:current\_work\_2TRUE |  |  |  | 8.41(.69,204.5) |  |
| poor\_healthTRUE:current\_drinkTRUE |  |  |  | 1.01(.5,2.07) |  |
| sedentaryTRUE:current\_work\_2TRUE |  |  |  | 3.27(.31,51.92) |  |
| sedentaryTRUE:current\_drinkTRUE |  |  |  | 1.02(.51,2.05) |  |
| current\_work\_2TRUE:current\_drinkTRUE |  |  |  | .02(0,.81). |  |

### A

solution of model **A** fit to data from **alsa** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -672.2898 | 1344.58 | 1356.6 | 1390.3 | 2052 | 2047 | 5 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .19 | (.14,.26) | -1.65 | .16 | 0.0000 | <=.001 |
| \*\*\* | age\_in\_years\_70 | .95 | (.93,.97) | -.05 | .01 | 0.0000 | <=.001 |
| \*\*\* | femaleTRUE | .57 | (.42,.76) | -.57 | .15 | 0.0002 | <=.001 |
|  | educ3\_f( < HS ) | 1.23 | (.81,1.84) | .21 | .21 | 0.3191 | > .10 |
|  | educ3\_f( HS < ) | 1.06 | (.77,1.45) | .06 | .16 | 0.7215 | > .10 |
|  | singleTRUE | 1.28 | (.92,1.77) | .25 | .17 | 0.1327 | > .10 |

### B

solution of model **B** fit to data from **alsa** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -669.032 | 1338.064 | 1358.1 | 1414.3 | 2052 | 2043 | 9 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .14 | (.09,.21) | -2 | .22 | 0.0000 | <=.001 |
| \*\*\* | age\_in\_years\_70 | .95 | (.93,.97) | -.05 | .01 | 0.0001 | <=.001 |
| \*\*\* | femaleTRUE | .6 | (.44,.81) | -.51 | .16 | 0.0009 | <=.001 |
|  | educ3\_f( < HS ) | 1.22 | (.8,1.82) | .2 | .21 | 0.3455 | > .10 |
|  | educ3\_f( HS < ) | 1.05 | (.76,1.44) | .05 | .16 | 0.7644 | > .10 |
|  | singleTRUE | 1.3 | (.93,1.79) | .26 | .17 | 0.1201 | > .10 |
|  | poor\_healthTRUE | 1.12 | (.82,1.53) | .12 | .16 | 0.4687 | > .10 |
|  | sedentaryTRUE | 1.16 | (.85,1.56) | .15 | .15 | 0.3424 | > .10 |
|  | current\_work\_2TRUE | 1.75 | (.64,4.1) | .56 | .47 | 0.2300 | > .10 |
| \* | current\_drinkTRUE | 1.38 | (1.01,1.92) | .33 | .16 | 0.0487 | <=.05 |

### AA

solution of model **AA** fit to data from **alsa** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -664.002 | 1328.004 | 1358 | 1442.4 | 2052 | 2038 | 14 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .15 | (.09,.24) | -1.9 | .24 | 0.0000 | <=.001 |
|  | age\_in\_years\_70 | .98 | (.93,1.03) | -.02 | .03 | 0.3972 | > .10 |
|  | femaleTRUE | .96 | (.53,1.71) | -.04 | .3 | 0.8809 | > .10 |
|  | educ3\_f( < HS ) | 1.43 | (.64,3.1) | .36 | .4 | 0.3695 | > .10 |
|  | educ3\_f( HS < ) | 1.16 | (.64,2.11) | .15 | .3 | 0.6276 | > .10 |
|  | singleTRUE | 1.02 | (.45,2.19) | .02 | .4 | 0.9673 | > .10 |
| \*\* | age\_in\_years\_70:femaleTRUE | .92 | (.87,.98) | -.08 | .03 | 0.0046 | <=.01 |
|  | age\_in\_years\_70:educ3\_f( < HS ) | 1.02 | (.95,1.1) | .02 | .04 | 0.5310 | > .10 |
|  | age\_in\_years\_70:educ3\_f( HS < ) | .98 | (.93,1.04) | -.02 | .03 | 0.5682 | > .10 |
|  | age\_in\_years\_70:singleTRUE | 1 | (.95,1.05) | 0 | .03 | 0.9437 | > .10 |
|  | femaleTRUE:educ3\_f( < HS ) | .45 | (.16,1.18) | -.8 | .5 | 0.1141 | > .10 |
|  | femaleTRUE:educ3\_f( HS < ) | .78 | (.39,1.53) | -.25 | .35 | 0.4639 | > .10 |
|  | femaleTRUE:singleTRUE | 1.7 | (.84,3.54) | .53 | .37 | 0.1477 | > .10 |
|  | educ3\_f( < HS ):singleTRUE | .74 | (.28,1.93) | -.3 | .49 | 0.5408 | > .10 |
|  | educ3\_f( HS < ):singleTRUE | 1.37 | (.67,2.84) | .31 | .37 | 0.3950 | > .10 |

### BB

solution of model **BB** fit to data from **alsa** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -647.6469 | 1295.294 | 1385.3 | 1638.5 | 2052 | 2008 | 44 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .18 | (.07,.42) | -1.69 | .44 | 0.0001 | <=.001 |
|  | age\_in\_years\_70 | .94 | (.87,1.01) | -.06 | .04 | 0.1157 | > .10 |
|  | femaleTRUE | .65 | (.28,1.56) | -.43 | .44 | 0.3311 | > .10 |
|  | educ3\_f( < HS ) | 1.44 | (.41,4.83) | .36 | .63 | 0.5615 | > .10 |
|  | educ3\_f( HS < ) | 1.01 | (.42,2.43) | .01 | .45 | 0.9771 | > .10 |
|  | singleTRUE | .69 | (.23,1.91) | -.37 | .54 | 0.4889 | > .10 |
|  | poor\_healthTRUE | 1.17 | (.48,2.83) | .16 | .45 | 0.7236 | > .10 |
|  | sedentaryTRUE | .96 | (.38,2.35) | -.04 | .46 | 0.9378 | > .10 |
|  | current\_work\_2TRUE | 61.72 | (.52,19638.03) | 4.12 | 2.53 | 0.1036 | > .10 |
|  | current\_drinkTRUE | .7 | (.31,1.64) | -.35 | .42 | 0.4003 | > .10 |
| \*\* | age\_in\_years\_70:femaleTRUE | .92 | (.87,.98) | -.08 | .03 | 0.0055 | <=.01 |
|  | age\_in\_years\_70:educ3\_f( < HS ) | 1 | (.93,1.08) | 0 | .04 | 0.9132 | > .10 |
|  | age\_in\_years\_70:educ3\_f( HS < ) | .98 | (.92,1.04) | -.02 | .03 | 0.5117 | > .10 |
|  | age\_in\_years\_70:singleTRUE | 1.01 | (.95,1.07) | .01 | .03 | 0.7665 | > .10 |
|  | age\_in\_years\_70:poor\_healthTRUE | 1 | (.94,1.06) | 0 | .03 | 0.9920 | > .10 |
|  | age\_in\_years\_70:sedentaryTRUE | 1.01 | (.96,1.07) | .01 | .03 | 0.6563 | > .10 |
|  | age\_in\_years\_70:current\_work\_2TRUE | .75 | (.47,1.02) | -.28 | .19 | 0.1321 | > .10 |
| . | age\_in\_years\_70:current\_drinkTRUE | 1.05 | (.99,1.12) | .05 | .03 | 0.0968 | <=.10 |
| \* | femaleTRUE:educ3\_f( < HS ) | .31 | (.1,.89) | -1.17 | .55 | 0.0339 | <=.05 |
|  | femaleTRUE:educ3\_f( HS < ) | .72 | (.35,1.47) | -.33 | .36 | 0.3642 | > .10 |
| . | femaleTRUE:singleTRUE | 2.1 | (1,4.55) | .74 | .39 | 0.0543 | <=.10 |
|  | femaleTRUE:poor\_healthTRUE | 1.36 | (.66,2.79) | .31 | .37 | 0.3975 | > .10 |
|  | femaleTRUE:sedentaryTRUE | 1.35 | (.67,2.76) | .3 | .36 | 0.4040 | > .10 |
|  | femaleTRUE:current\_work\_2TRUE | .14 | (0,4) | -1.98 | 1.95 | 0.3098 | > .10 |
|  | femaleTRUE:current\_drinkTRUE | 1.39 | (.66,2.92) | .33 | .38 | 0.3824 | > .10 |
|  | educ3\_f( < HS ):singleTRUE | .88 | (.32,2.41) | -.13 | .52 | 0.8080 | > .10 |
|  | educ3\_f( HS < ):singleTRUE | 1.33 | (.63,2.86) | .29 | .39 | 0.4551 | > .10 |
|  | educ3\_f( < HS ):poor\_healthTRUE | .99 | (.4,2.46) | -.01 | .46 | 0.9886 | > .10 |
|  | educ3\_f( HS < ):poor\_healthTRUE | .77 | (.37,1.57) | -.26 | .36 | 0.4770 | > .10 |
| \* | educ3\_f( < HS ):sedentaryTRUE | 2.71 | (1.11,6.82) | 1 | .46 | 0.0304 | <=.05 |
|  | educ3\_f( HS < ):sedentaryTRUE | 1.1 | (.54,2.24) | .1 | .36 | 0.7884 | > .10 |
|  | educ3\_f( < HS ):current\_work\_2TRUE | 1.09 | (.03,37.99) | .09 | 1.67 | 0.9584 | > .10 |
|  | educ3\_f( HS < ):current\_work\_2TRUE | .46 | (.02,6.09) | -.77 | 1.38 | 0.5762 | > .10 |
|  | educ3\_f( < HS ):current\_drinkTRUE | .67 | (.26,1.75) | -.4 | .49 | 0.4083 | > .10 |
|  | educ3\_f( HS < ):current\_drinkTRUE | 1.38 | (.65,2.93) | .32 | .38 | 0.4004 | > .10 |
|  | singleTRUE:poor\_healthTRUE | 1.1 | (.53,2.28) | .1 | .37 | 0.7914 | > .10 |
|  | singleTRUE:sedentaryTRUE | .63 | (.3,1.28) | -.47 | .37 | 0.2051 | > .10 |
|  | singleTRUE:current\_work\_2TRUE | 2.3 | (.17,38.18) | .83 | 1.32 | 0.5278 | > .10 |
|  | singleTRUE:current\_drinkTRUE | 1.63 | (.76,3.59) | .49 | .4 | 0.2191 | > .10 |
|  | poor\_healthTRUE:sedentaryTRUE | .72 | (.37,1.42) | -.32 | .34 | 0.3468 | > .10 |
|  | poor\_healthTRUE:current\_work\_2TRUE | 8.41 | (.69,204.5) | 2.13 | 1.38 | 0.1217 | > .10 |
|  | poor\_healthTRUE:current\_drinkTRUE | 1.01 | (.5,2.07) | .01 | .36 | 0.9782 | > .10 |
|  | sedentaryTRUE:current\_work\_2TRUE | 3.27 | (.31,51.92) | 1.18 | 1.24 | 0.3392 | > .10 |
|  | sedentaryTRUE:current\_drinkTRUE | 1.02 | (.51,2.05) | .02 | .35 | 0.9583 | > .10 |
| . | current\_work\_2TRUE:current\_drinkTRUE | .02 | (0,.81) | -3.77 | 2.13 | 0.0768 | <=.10 |

### best

solution of model **best** fit to data from **alsa** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -5349.962 | 10699.92 | 10713.9 | 10765.9 | 12327 | 12321 | 6 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .14 | (.13,.15) | -1.94 | .04 | 0.0000 | <=.001 |
| \*\*\* | age\_in\_years\_70 | .98 | (.97,.99) | -.02 | 0 | 0.0000 | <=.001 |
| \*\* | singleTRUE | 1.39 | (1.13,1.69) | .33 | .1 | 0.0014 | <=.01 |
| . | age\_in\_years\_70:femaleTRUE | .99 | (.99,1) | -.01 | 0 | 0.0999 | <=.10 |
| \*\*\* | singleTRUE:femaleTRUE | .7 | (.59,.84) | -.35 | .09 | 0.0001 | <=.001 |
| \*\*\* | age\_in\_years\_70:current\_drinkTRUE | .98 | (.98,.99) | -.02 | 0 | 0.0001 | <=.001 |
| \*\*\* | singleTRUE:current\_drinkTRUE | 1.52 | (1.26,1.83) | .42 | .09 | 0.0000 | <=.001 |

## lbsl

### BETWEEN

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| coef\_name | A | B | AA | BB | best |
| (Intercept) | .09(.05,.17)\*\*\* | .11(.05,.22)\*\*\* | .1(.04,.23)\*\*\* | .05(.01,.28)\*\* | .14(.13,.15)\*\*\* |
| age\_in\_years\_70 | .97(.95,.99)\*\* | .97(.94,.99)\*\* | .95(.9,1)\* | .9(.83,.98)\* | .98(.96,.99)\*\*\* |
| femaleTRUE | 1.45(.84,2.53) | 1.35(.78,2.39) | .86(.25,2.98) | .31(.04,2.11) |  |
| educ3\_f( < HS ) | 1.58(.67,3.59) | 1.62(.67,3.77) | 1.45(.25,6.78) | 5.35(.33,70.89) |  |
| educ3\_f( HS < ) | .84(.46,1.57) | .95(.51,1.8) | 1.02(.37,3.14) | 2.01(.35,13.01) |  |
| singleTRUE | 1.65(.97,2.81). | 1.68(.97,2.9). | 1.2(.27,4.83) | 2.27(.29,17.5) |  |
| poor\_healthTRUE |  | .73(.42,1.27) |  | .66(.11,3.76) |  |
| sedentaryTRUE |  | 2.97(1.56,5.55)\*\*\* |  | 10.07(1.43,71.57)\* | 1.6(1.43,1.77)\*\*\* |
| current\_work\_2TRUE |  | .9(.45,1.78) |  | 1.53(.16,11.94) |  |
| current\_drinkTRUE |  | .64(.37,1.11) |  | 1(.16,6.62) |  |
| age\_in\_years\_70:femaleTRUE |  |  | 1.03(.99,1.08) | 1.02(.97,1.08) | .99(.99,1) |
| age\_in\_years\_70:educ3\_f( < HS ) |  |  | .98(.89,1.07) | .92(.81,1.03) |  |
| age\_in\_years\_70:educ3\_f( HS < ) |  |  | 1.03(.99,1.08) | 1.01(.95,1.07) |  |
| age\_in\_years\_70:singleTRUE |  |  | .97(.93,1.01) | .97(.92,1.03) | .99(.98,1) |
| age\_in\_years\_70:poor\_healthTRUE |  |  |  | 1.03(.97,1.09) | .99(.98,1)\* |
| age\_in\_years\_70:sedentaryTRUE |  |  |  | 1.04(.97,1.12) |  |
| age\_in\_years\_70:current\_work\_2TRUE |  |  |  | 1.05(.99,1.11). | 1.02(1.01,1.03)\*\*\* |
| age\_in\_years\_70:current\_drinkTRUE |  |  |  | 1.04(.98,1.1) | .98(.97,.99)\*\*\* |
| femaleTRUE:educ3\_f( < HS ) |  |  | 2.06(.28,16.57) | 1.17(.1,14.18) |  |
| femaleTRUE:educ3\_f( HS < ) |  |  | 1.71(.43,6.72) | 1.89(.37,10.14) |  |
| femaleTRUE:singleTRUE |  |  | 2.37(.71,8.72) | 5.13(1.23,25.99)\* | .82(.71,.95)\* |
| femaleTRUE:poor\_healthTRUE |  |  |  | 1.73(.43,7.25) |  |
| femaleTRUE:sedentaryTRUE |  |  |  | .98(.18,5.75) |  |
| femaleTRUE:current\_work\_2TRUE |  |  |  | .81(.17,3.82) |  |
| femaleTRUE:current\_drinkTRUE |  |  |  | 2.01(.44,9.83) |  |
| educ3\_f( < HS ):singleTRUE |  |  | .85(.11,6.93) | 3.16(.23,49.8) |  |
| educ3\_f( HS < ):singleTRUE |  |  | .49(.13,1.83) | .46(.08,2.41) |  |
| educ3\_f( < HS ):poor\_healthTRUE |  |  |  | .81(.1,6.52) |  |
| educ3\_f( HS < ):poor\_healthTRUE |  |  |  | .96(.23,4.04) |  |
| educ3\_f( < HS ):sedentaryTRUE |  |  |  | .89(.09,10.33) |  |
| educ3\_f( HS < ):sedentaryTRUE |  |  |  | .33(.06,1.78) |  |
| educ3\_f( < HS ):current\_work\_2TRUE |  |  |  | .12(0,2.21) |  |
| educ3\_f( HS < ):current\_work\_2TRUE |  |  |  | .3(.05,1.56) |  |
| educ3\_f( < HS ):current\_drinkTRUE |  |  |  | .28(.03,2.56) |  |
| educ3\_f( HS < ):current\_drinkTRUE |  |  |  | 1.1(.23,5.45) |  |
| singleTRUE:poor\_healthTRUE |  |  |  | .52(.13,2.15) |  |
| singleTRUE:sedentaryTRUE |  |  |  | .64(.12,3.32) |  |
| singleTRUE:current\_work\_2TRUE |  |  |  | 1.78(.35,9.33) |  |
| singleTRUE:current\_drinkTRUE |  |  |  | .26(.05,1.12). | 1.84(1.59,2.13)\*\*\* |
| poor\_healthTRUE:sedentaryTRUE |  |  |  | 1.33(.3,6.14) |  |
| poor\_healthTRUE:current\_work\_2TRUE |  |  |  | .85(.16,4.09) |  |
| poor\_healthTRUE:current\_drinkTRUE |  |  |  | 1.82(.47,7.41) |  |
| sedentaryTRUE:current\_work\_2TRUE |  |  |  | 6.53(.89,55.81). |  |
| sedentaryTRUE:current\_drinkTRUE |  |  |  | .25(.04,1.24) |  |
| current\_work\_2TRUE:current\_drinkTRUE |  |  |  | 1.94(.39,11.33) |  |

### A

solution of model **A** fit to data from **lbsl** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -195.815 | 391.63 | 403.6 | 429.2 | 522 | 517 | 5 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .09 | (.05,.17) | -2.39 | .32 | 0.0000 | <=.001 |
| \*\* | age\_in\_years\_70 | .97 | (.95,.99) | -.03 | .01 | 0.0038 | <=.01 |
|  | femaleTRUE | 1.45 | (.84,2.53) | .37 | .28 | 0.1873 | > .10 |
|  | educ3\_f( < HS ) | 1.58 | (.67,3.59) | .46 | .42 | 0.2823 | > .10 |
|  | educ3\_f( HS < ) | .84 | (.46,1.57) | -.17 | .31 | 0.5807 | > .10 |
| . | singleTRUE | 1.65 | (.97,2.81) | .5 | .27 | 0.0668 | <=.10 |

### B

solution of model **B** fit to data from **lbsl** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -188.4152 | 376.8303 | 396.8 | 439.4 | 522 | 513 | 9 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .11 | (.05,.22) | -2.22 | .38 | 0.0000 | <=.001 |
| \*\* | age\_in\_years\_70 | .97 | (.94,.99) | -.03 | .01 | 0.0052 | <=.01 |
|  | femaleTRUE | 1.35 | (.78,2.39) | .3 | .29 | 0.2908 | > .10 |
|  | educ3\_f( < HS ) | 1.62 | (.67,3.77) | .48 | .44 | 0.2667 | > .10 |
|  | educ3\_f( HS < ) | .95 | (.51,1.8) | -.05 | .32 | 0.8646 | > .10 |
| . | singleTRUE | 1.68 | (.97,2.9) | .52 | .28 | 0.0621 | <=.10 |
|  | poor\_healthTRUE | .73 | (.42,1.27) | -.31 | .28 | 0.2740 | > .10 |
| \*\*\* | sedentaryTRUE | 2.97 | (1.56,5.55) | 1.09 | .32 | 0.0007 | <=.001 |
|  | current\_work\_2TRUE | .9 | (.45,1.78) | -.1 | .35 | 0.7647 | > .10 |
|  | current\_drinkTRUE | .64 | (.37,1.11) | -.45 | .28 | 0.1108 | > .10 |

### AA

solution of model **AA** fit to data from **lbsl** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -190.5223 | 381.0446 | 411 | 474.9 | 522 | 508 | 14 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .1 | (.04,.23) | -2.29 | .46 | 0.0000 | <=.001 |
| \* | age\_in\_years\_70 | .95 | (.9,1) | -.05 | .03 | 0.0383 | <=.05 |
|  | femaleTRUE | .86 | (.25,2.98) | -.15 | .62 | 0.8135 | > .10 |
|  | educ3\_f( < HS ) | 1.45 | (.25,6.78) | .37 | .82 | 0.6502 | > .10 |
|  | educ3\_f( HS < ) | 1.02 | (.37,3.14) | .02 | .54 | 0.9733 | > .10 |
|  | singleTRUE | 1.2 | (.27,4.83) | .18 | .73 | 0.8008 | > .10 |
|  | age\_in\_years\_70:femaleTRUE | 1.03 | (.99,1.08) | .03 | .02 | 0.1418 | > .10 |
|  | age\_in\_years\_70:educ3\_f( < HS ) | .98 | (.89,1.07) | -.02 | .05 | 0.6083 | > .10 |
|  | age\_in\_years\_70:educ3\_f( HS < ) | 1.03 | (.99,1.08) | .03 | .02 | 0.1543 | > .10 |
|  | age\_in\_years\_70:singleTRUE | .97 | (.93,1.01) | -.03 | .02 | 0.1590 | > .10 |
|  | femaleTRUE:educ3\_f( < HS ) | 2.06 | (.28,16.57) | .72 | 1.02 | 0.4820 | > .10 |
|  | femaleTRUE:educ3\_f( HS < ) | 1.71 | (.43,6.72) | .54 | .69 | 0.4388 | > .10 |
|  | femaleTRUE:singleTRUE | 2.37 | (.71,8.72) | .86 | .63 | 0.1731 | > .10 |
|  | educ3\_f( < HS ):singleTRUE | .85 | (.11,6.93) | -.17 | 1.05 | 0.8732 | > .10 |
|  | educ3\_f( HS < ):singleTRUE | .49 | (.13,1.83) | -.7 | .67 | 0.2953 | > .10 |

### BB

solution of model **BB** fit to data from **lbsl** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -171.3046 | 342.6091 | 432.6 | 624.3 | 522 | 478 | 44 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\* | (Intercept) | .05 | (.01,.28) | -2.96 | .94 | 0.0017 | <=.01 |
| \* | age\_in\_years\_70 | .9 | (.83,.98) | -.1 | .04 | 0.0165 | <=.05 |
|  | femaleTRUE | .31 | (.04,2.11) | -1.17 | 1 | 0.2404 | > .10 |
|  | educ3\_f( < HS ) | 5.35 | (.33,70.89) | 1.68 | 1.34 | 0.2115 | > .10 |
|  | educ3\_f( HS < ) | 2.01 | (.35,13.01) | .7 | .91 | 0.4446 | > .10 |
|  | singleTRUE | 2.27 | (.29,17.5) | .82 | 1.04 | 0.4310 | > .10 |
|  | poor\_healthTRUE | .66 | (.11,3.76) | -.41 | .89 | 0.6446 | > .10 |
| \* | sedentaryTRUE | 10.07 | (1.43,71.57) | 2.31 | .99 | 0.0192 | <=.05 |
|  | current\_work\_2TRUE | 1.53 | (.16,11.94) | .43 | 1.08 | 0.6926 | > .10 |
|  | current\_drinkTRUE | 1 | (.16,6.62) | 0 | .94 | 0.9984 | > .10 |
|  | age\_in\_years\_70:femaleTRUE | 1.02 | (.97,1.08) | .02 | .03 | 0.4195 | > .10 |
|  | age\_in\_years\_70:educ3\_f( < HS ) | .92 | (.81,1.03) | -.09 | .06 | 0.1511 | > .10 |
|  | age\_in\_years\_70:educ3\_f( HS < ) | 1.01 | (.95,1.07) | .01 | .03 | 0.7474 | > .10 |
|  | age\_in\_years\_70:singleTRUE | .97 | (.92,1.03) | -.03 | .03 | 0.2938 | > .10 |
|  | age\_in\_years\_70:poor\_healthTRUE | 1.03 | (.97,1.09) | .03 | .03 | 0.4032 | > .10 |
|  | age\_in\_years\_70:sedentaryTRUE | 1.04 | (.97,1.12) | .04 | .04 | 0.2757 | > .10 |
| . | age\_in\_years\_70:current\_work\_2TRUE | 1.05 | (.99,1.11) | .05 | .03 | 0.0909 | <=.10 |
|  | age\_in\_years\_70:current\_drinkTRUE | 1.04 | (.98,1.1) | .04 | .03 | 0.1938 | > .10 |
|  | femaleTRUE:educ3\_f( < HS ) | 1.17 | (.1,14.18) | .16 | 1.25 | 0.8983 | > .10 |
|  | femaleTRUE:educ3\_f( HS < ) | 1.89 | (.37,10.14) | .64 | .83 | 0.4450 | > .10 |
| \* | femaleTRUE:singleTRUE | 5.13 | (1.23,25.99) | 1.63 | .77 | 0.0332 | <=.05 |
|  | femaleTRUE:poor\_healthTRUE | 1.73 | (.43,7.25) | .55 | .72 | 0.4437 | > .10 |
|  | femaleTRUE:sedentaryTRUE | .98 | (.18,5.75) | -.02 | .87 | 0.9813 | > .10 |
|  | femaleTRUE:current\_work\_2TRUE | .81 | (.17,3.82) | -.21 | .79 | 0.7878 | > .10 |
|  | femaleTRUE:current\_drinkTRUE | 2.01 | (.44,9.83) | .7 | .78 | 0.3717 | > .10 |
|  | educ3\_f( < HS ):singleTRUE | 3.16 | (.23,49.8) | 1.15 | 1.35 | 0.3926 | > .10 |
|  | educ3\_f( HS < ):singleTRUE | .46 | (.08,2.41) | -.77 | .85 | 0.3631 | > .10 |
|  | educ3\_f( < HS ):poor\_healthTRUE | .81 | (.1,6.52) | -.21 | 1.05 | 0.8411 | > .10 |
|  | educ3\_f( HS < ):poor\_healthTRUE | .96 | (.23,4.04) | -.04 | .73 | 0.9584 | > .10 |
|  | educ3\_f( < HS ):sedentaryTRUE | .89 | (.09,10.33) | -.12 | 1.2 | 0.9222 | > .10 |
|  | educ3\_f( HS < ):sedentaryTRUE | .33 | (.06,1.78) | -1.11 | .87 | 0.2020 | > .10 |
|  | educ3\_f( < HS ):current\_work\_2TRUE | .12 | (0,2.21) | -2.09 | 1.55 | 0.1778 | > .10 |
|  | educ3\_f( HS < ):current\_work\_2TRUE | .3 | (.05,1.56) | -1.22 | .85 | 0.1531 | > .10 |
|  | educ3\_f( < HS ):current\_drinkTRUE | .28 | (.03,2.56) | -1.29 | 1.14 | 0.2578 | > .10 |
|  | educ3\_f( HS < ):current\_drinkTRUE | 1.1 | (.23,5.45) | .1 | .8 | 0.9024 | > .10 |
|  | singleTRUE:poor\_healthTRUE | .52 | (.13,2.15) | -.64 | .72 | 0.3689 | > .10 |
|  | singleTRUE:sedentaryTRUE | .64 | (.12,3.32) | -.44 | .84 | 0.5982 | > .10 |
|  | singleTRUE:current\_work\_2TRUE | 1.78 | (.35,9.33) | .57 | .83 | 0.4892 | > .10 |
| . | singleTRUE:current\_drinkTRUE | .26 | (.05,1.12) | -1.35 | .77 | 0.0793 | <=.10 |
|  | poor\_healthTRUE:sedentaryTRUE | 1.33 | (.3,6.14) | .29 | .76 | 0.7089 | > .10 |
|  | poor\_healthTRUE:current\_work\_2TRUE | .85 | (.16,4.09) | -.17 | .82 | 0.8383 | > .10 |
|  | poor\_healthTRUE:current\_drinkTRUE | 1.82 | (.47,7.41) | .6 | .7 | 0.3917 | > .10 |
| . | sedentaryTRUE:current\_work\_2TRUE | 6.53 | (.89,55.81) | 1.88 | 1.04 | 0.0724 | <=.10 |
|  | sedentaryTRUE:current\_drinkTRUE | .25 | (.04,1.24) | -1.38 | .84 | 0.1020 | > .10 |
|  | current\_work\_2TRUE:current\_drinkTRUE | 1.94 | (.39,11.33) | .66 | .85 | 0.4373 | > .10 |

### best

solution of model **best** fit to data from **lbsl** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -5303.738 | 10607.48 | 10627.5 | 10701.7 | 12327 | 12318 | 9 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .14 | (.13,.15) | -1.99 | .04 | 0.0000 | <=.001 |
| \*\*\* | age\_in\_years\_70 | .98 | (.96,.99) | -.03 | .01 | 0.0000 | <=.001 |
| \*\*\* | sedentaryTRUE | 1.6 | (1.43,1.77) | .47 | .05 | 0.0000 | <=.001 |
|  | age\_in\_years\_70:femaleTRUE | .99 | (.99,1) | -.01 | 0 | 0.1992 | > .10 |
|  | age\_in\_years\_70:singleTRUE | .99 | (.98,1) | -.01 | 0 | 0.1566 | > .10 |
| \* | femaleTRUE:singleTRUE | .82 | (.71,.95) | -.2 | .08 | 0.0103 | <=.05 |
| \* | age\_in\_years\_70:poor\_healthTRUE | .99 | (.98,1) | -.01 | 0 | 0.0321 | <=.05 |
| \*\*\* | age\_in\_years\_70:current\_work\_2TRUE | 1.02 | (1.01,1.03) | .02 | 0 | 0.0000 | <=.001 |
| \*\*\* | age\_in\_years\_70:current\_drinkTRUE | .98 | (.97,.99) | -.02 | 0 | 0.0000 | <=.001 |
| \*\*\* | singleTRUE:current\_drinkTRUE | 1.84 | (1.59,2.13) | .61 | .08 | 0.0000 | <=.001 |

## satsa

### BETWEEN

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| coef\_name | A | B | AA | BB | best |
| (Intercept) | .25(.15,.42)\*\*\* | .08(.04,.15)\*\*\* | .13(.04,.34)\*\*\* | .03(0,.25)\*\* | .13(.11,.15)\*\*\* |
| age\_in\_years\_70 | .95(.94,.96)\*\*\* | .95(.93,.96)\*\*\* | .93(.87,.98)\* | .76(.64,.87)\*\*\* | .96(.95,.97)\*\*\* |
| femaleTRUE | .44(.34,.57)\*\*\* | .48(.37,.63)\*\*\* | .66(.22,1.98) | .7(.15,3.2) | .74(.66,.84)\*\*\* |
| educ3\_f( < HS ) | 1.17(.72,1.98) | 1.27(.77,2.17) | 2.93(1.13,9.05)\* | 4.14(.47,73.97) |  |
| educ3\_f( HS < ) | 1.03(.51,2.06) | 1.13(.56,2.28) | 1.39(.36,5.56) | 3.51(.24,85.22) |  |
| singleTRUE | 1.46(1.09,1.94)\* | 1.59(1.18,2.13)\*\* | 2.17(.66,7.31) | 4.75(.97,24.56). | 1.6(1.4,1.84)\*\*\* |
| poor\_healthTRUE |  | 1.19(.9,1.57) |  | 1.68(.34,7.77) | 1.39(1.22,1.58)\*\*\* |
| sedentaryTRUE |  | 1.58(1.19,2.12)\*\* |  | .64(.14,3.08) |  |
| current\_work\_2TRUE |  | .67(.46,.97)\* |  | .01(0,.1)\*\*\* | .64(.5,.8)\*\*\* |
| current\_drinkTRUE |  | 2.87(2.03,4.12)\*\*\* |  | 9.1(1.32,119.98)\* | 1.25(1.12,1.4)\*\*\* |
| age\_in\_years\_70:femaleTRUE |  |  | .96(.93,.98)\*\*\* | .98(.95,1.02) |  |
| age\_in\_years\_70:educ3\_f( < HS ) |  |  | 1.05(.99,1.12) | 1.23(1.1,1.45)\*\* | .99(.98,1.01) |
| age\_in\_years\_70:educ3\_f( HS < ) |  |  | 1.02(.95,1.11) | 1.15(1,1.37). | 1.01(.99,1.03) |
| age\_in\_years\_70:singleTRUE |  |  | 1(.98,1.02) | 1.01(.98,1.05) |  |
| age\_in\_years\_70:poor\_healthTRUE |  |  |  | 1(.97,1.03) |  |
| age\_in\_years\_70:sedentaryTRUE |  |  |  | 1(.96,1.03) | .99(.98,1)\*\* |
| age\_in\_years\_70:current\_work\_2TRUE |  |  |  | .99(.96,1.03) |  |
| age\_in\_years\_70:current\_drinkTRUE |  |  |  | 1.04(.99,1.08) |  |
| femaleTRUE:educ3\_f( < HS ) |  |  | .4(.13,1.19). | .44(.12,1.62) |  |
| femaleTRUE:educ3\_f( HS < ) |  |  | .69(.16,2.95) | .6(.11,3.15) |  |
| femaleTRUE:singleTRUE |  |  | .76(.42,1.36) | .78(.42,1.45) |  |
| femaleTRUE:poor\_healthTRUE |  |  |  | .73(.4,1.33) |  |
| femaleTRUE:sedentaryTRUE |  |  |  | 1.1(.6,2.05) |  |
| femaleTRUE:current\_work\_2TRUE |  |  |  | 2.04(.91,4.59). | 1.36(1.1,1.67)\*\* |
| femaleTRUE:current\_drinkTRUE |  |  |  | .99(.46,2.11) |  |
| educ3\_f( < HS ):singleTRUE |  |  | .8(.24,2.62) | .81(.19,3.26) |  |
| educ3\_f( HS < ):singleTRUE |  |  | 1.17(.25,5.51) | .89(.15,5.09) |  |
| educ3\_f( < HS ):poor\_healthTRUE |  |  |  | 1.18(.32,4.77) |  |
| educ3\_f( HS < ):poor\_healthTRUE |  |  |  | 1.29(.24,7.39) |  |
| educ3\_f( < HS ):sedentaryTRUE |  |  |  | 1.83(.49,6.57) |  |
| educ3\_f( HS < ):sedentaryTRUE |  |  |  | 2.03(.36,11.93) |  |
| educ3\_f( < HS ):current\_work\_2TRUE |  |  |  | 30.16(3.81,392.84)\*\* |  |
| educ3\_f( HS < ):current\_work\_2TRUE |  |  |  | 10.75(.78,201.89). |  |
| educ3\_f( < HS ):current\_drinkTRUE |  |  |  | .36(.03,2.06) |  |
| educ3\_f( HS < ):current\_drinkTRUE |  |  |  | .22(.02,2.01) |  |
| singleTRUE:poor\_healthTRUE |  |  |  | .54(.28,1.02). | .85(.68,1.06) |
| singleTRUE:sedentaryTRUE |  |  |  | .66(.35,1.27) |  |
| singleTRUE:current\_work\_2TRUE |  |  |  | 1.26(.5,3.16) |  |
| singleTRUE:current\_drinkTRUE |  |  |  | .8(.37,1.71) |  |
| poor\_healthTRUE:sedentaryTRUE |  |  |  | 1.09(.57,2.11) |  |
| poor\_healthTRUE:current\_work\_2TRUE |  |  |  | 1.38(.61,3.1) |  |
| poor\_healthTRUE:current\_drinkTRUE |  |  |  | .62(.29,1.31) |  |
| sedentaryTRUE:current\_work\_2TRUE |  |  |  | 1.25(.53,2.99) |  |
| sedentaryTRUE:current\_drinkTRUE |  |  |  | 1.43(.64,3.15) |  |
| current\_work\_2TRUE:current\_drinkTRUE |  |  |  | 1.56(.54,4.67) |  |

### A

solution of model **A** fit to data from **satsa** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -688.693 | 1377.386 | 1389.4 | 1420.6 | 1351 | 1346 | 5 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .25 | (.15,.42) | -1.37 | .26 | 0.0000 | <=.001 |
| \*\*\* | age\_in\_years\_70 | .95 | (.94,.96) | -.06 | .01 | 0.0000 | <=.001 |
| \*\*\* | femaleTRUE | .44 | (.34,.57) | -.83 | .13 | 0.0000 | <=.001 |
|  | educ3\_f( < HS ) | 1.17 | (.72,1.98) | .16 | .26 | 0.5407 | > .10 |
|  | educ3\_f( HS < ) | 1.03 | (.51,2.06) | .03 | .35 | 0.9352 | > .10 |
| \* | singleTRUE | 1.46 | (1.09,1.94) | .38 | .15 | 0.0103 | <=.05 |

### B

solution of model **B** fit to data from **satsa** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -663.8472 | 1327.694 | 1347.7 | 1399.8 | 1351 | 1342 | 9 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .08 | (.04,.15) | -2.5 | .33 | 0.0000 | <=.001 |
| \*\*\* | age\_in\_years\_70 | .95 | (.93,.96) | -.06 | .01 | 0.0000 | <=.001 |
| \*\*\* | femaleTRUE | .48 | (.37,.63) | -.73 | .14 | 0.0000 | <=.001 |
|  | educ3\_f( < HS ) | 1.27 | (.77,2.17) | .24 | .26 | 0.3553 | > .10 |
|  | educ3\_f( HS < ) | 1.13 | (.56,2.28) | .12 | .36 | 0.7405 | > .10 |
| \*\* | singleTRUE | 1.59 | (1.18,2.13) | .46 | .15 | 0.0023 | <=.01 |
|  | poor\_healthTRUE | 1.19 | (.9,1.57) | .17 | .14 | 0.2304 | > .10 |
| \*\* | sedentaryTRUE | 1.58 | (1.19,2.12) | .46 | .15 | 0.0019 | <=.01 |
| \* | current\_work\_2TRUE | .67 | (.46,.97) | -.4 | .19 | 0.0369 | <=.05 |
| \*\*\* | current\_drinkTRUE | 2.87 | (2.03,4.12) | 1.05 | .18 | 0.0000 | <=.001 |

### AA

solution of model **AA** fit to data from **satsa** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -675.0522 | 1350.104 | 1380.1 | 1458.2 | 1351 | 1337 | 14 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .13 | (.04,.34) | -2.02 | .52 | 0.0001 | <=.001 |
| \* | age\_in\_years\_70 | .93 | (.87,.98) | -.08 | .03 | 0.0131 | <=.05 |
|  | femaleTRUE | .66 | (.22,1.98) | -.41 | .55 | 0.4559 | > .10 |
| \* | educ3\_f( < HS ) | 2.93 | (1.13,9.05) | 1.08 | .53 | 0.0409 | <=.05 |
|  | educ3\_f( HS < ) | 1.39 | (.36,5.56) | .33 | .69 | 0.6362 | > .10 |
|  | singleTRUE | 2.17 | (.66,7.31) | .78 | .61 | 0.2020 | > .10 |
| \*\*\* | age\_in\_years\_70:femaleTRUE | .96 | (.93,.98) | -.05 | .01 | 0.0001 | <=.001 |
|  | age\_in\_years\_70:educ3\_f( < HS ) | 1.05 | (.99,1.12) | .05 | .03 | 0.1140 | > .10 |
|  | age\_in\_years\_70:educ3\_f( HS < ) | 1.02 | (.95,1.11) | .02 | .04 | 0.5602 | > .10 |
|  | age\_in\_years\_70:singleTRUE | 1 | (.98,1.02) | 0 | .01 | 0.9965 | > .10 |
| . | femaleTRUE:educ3\_f( < HS ) | .4 | (.13,1.19) | -.91 | .55 | 0.0983 | <=.10 |
|  | femaleTRUE:educ3\_f( HS < ) | .69 | (.16,2.95) | -.37 | .74 | 0.6180 | > .10 |
|  | femaleTRUE:singleTRUE | .76 | (.42,1.36) | -.28 | .3 | 0.3530 | > .10 |
|  | educ3\_f( < HS ):singleTRUE | .8 | (.24,2.62) | -.22 | .6 | 0.7145 | > .10 |
|  | educ3\_f( HS < ):singleTRUE | 1.17 | (.25,5.51) | .16 | .79 | 0.8376 | > .10 |

### BB

solution of model **BB** fit to data from **satsa** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -635.8426 | 1271.685 | 1361.7 | 1596.1 | 1351 | 1307 | 44 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\* | (Intercept) | .03 | (0,.25) | -3.63 | 1.31 | 0.0057 | <=.01 |
| \*\*\* | age\_in\_years\_70 | .76 | (.64,.87) | -.28 | .07 | 0.0002 | <=.001 |
|  | femaleTRUE | .7 | (.15,3.2) | -.36 | .77 | 0.6411 | > .10 |
|  | educ3\_f( < HS ) | 4.14 | (.47,73.97) | 1.42 | 1.25 | 0.2572 | > .10 |
|  | educ3\_f( HS < ) | 3.51 | (.24,85.22) | 1.25 | 1.46 | 0.3910 | > .10 |
| . | singleTRUE | 4.75 | (.97,24.56) | 1.56 | .82 | 0.0569 | <=.10 |
|  | poor\_healthTRUE | 1.68 | (.34,7.77) | .52 | .79 | 0.5146 | > .10 |
|  | sedentaryTRUE | .64 | (.14,3.08) | -.44 | .78 | 0.5730 | > .10 |
| \*\*\* | current\_work\_2TRUE | .01 | (0,.1) | -4.72 | 1.34 | 0.0004 | <=.001 |
| \* | current\_drinkTRUE | 9.1 | (1.32,119.98) | 2.21 | 1.11 | 0.0473 | <=.05 |
|  | age\_in\_years\_70:femaleTRUE | .98 | (.95,1.02) | -.02 | .02 | 0.3450 | > .10 |
| \*\* | age\_in\_years\_70:educ3\_f( < HS ) | 1.23 | (1.1,1.45) | .21 | .07 | 0.0027 | <=.01 |
| . | age\_in\_years\_70:educ3\_f( HS < ) | 1.15 | (1,1.37) | .14 | .08 | 0.0720 | <=.10 |
|  | age\_in\_years\_70:singleTRUE | 1.01 | (.98,1.05) | .01 | .02 | 0.4881 | > .10 |
|  | age\_in\_years\_70:poor\_healthTRUE | 1 | (.97,1.03) | 0 | .02 | 0.9173 | > .10 |
|  | age\_in\_years\_70:sedentaryTRUE | 1 | (.96,1.03) | 0 | .02 | 0.9352 | > .10 |
|  | age\_in\_years\_70:current\_work\_2TRUE | .99 | (.96,1.03) | -.01 | .02 | 0.6923 | > .10 |
|  | age\_in\_years\_70:current\_drinkTRUE | 1.04 | (.99,1.08) | .03 | .02 | 0.1220 | > .10 |
|  | femaleTRUE:educ3\_f( < HS ) | .44 | (.12,1.62) | -.82 | .66 | 0.2104 | > .10 |
|  | femaleTRUE:educ3\_f( HS < ) | .6 | (.11,3.15) | -.5 | .84 | 0.5495 | > .10 |
|  | femaleTRUE:singleTRUE | .78 | (.42,1.45) | -.25 | .32 | 0.4375 | > .10 |
|  | femaleTRUE:poor\_healthTRUE | .73 | (.4,1.33) | -.31 | .3 | 0.3048 | > .10 |
|  | femaleTRUE:sedentaryTRUE | 1.1 | (.6,2.05) | .1 | .31 | 0.7555 | > .10 |
| . | femaleTRUE:current\_work\_2TRUE | 2.04 | (.91,4.59) | .71 | .41 | 0.0836 | <=.10 |
|  | femaleTRUE:current\_drinkTRUE | .99 | (.46,2.11) | -.01 | .39 | 0.9831 | > .10 |
|  | educ3\_f( < HS ):singleTRUE | .81 | (.19,3.26) | -.2 | .71 | 0.7740 | > .10 |
|  | educ3\_f( HS < ):singleTRUE | .89 | (.15,5.09) | -.11 | .89 | 0.9002 | > .10 |
|  | educ3\_f( < HS ):poor\_healthTRUE | 1.18 | (.32,4.77) | .17 | .68 | 0.8050 | > .10 |
|  | educ3\_f( HS < ):poor\_healthTRUE | 1.29 | (.24,7.39) | .25 | .87 | 0.7694 | > .10 |
|  | educ3\_f( < HS ):sedentaryTRUE | 1.83 | (.49,6.57) | .6 | .66 | 0.3578 | > .10 |
|  | educ3\_f( HS < ):sedentaryTRUE | 2.03 | (.36,11.93) | .71 | .89 | 0.4266 | > .10 |
| \*\* | educ3\_f( < HS ):current\_work\_2TRUE | 30.16 | (3.81,392.84) | 3.41 | 1.17 | 0.0035 | <=.01 |
| . | educ3\_f( HS < ):current\_work\_2TRUE | 10.75 | (.78,201.89) | 2.38 | 1.4 | 0.0892 | <=.10 |
|  | educ3\_f( < HS ):current\_drinkTRUE | .36 | (.03,2.06) | -1.02 | 1.02 | 0.3147 | > .10 |
|  | educ3\_f( HS < ):current\_drinkTRUE | .22 | (.02,2.01) | -1.49 | 1.2 | 0.2118 | > .10 |
| . | singleTRUE:poor\_healthTRUE | .54 | (.28,1.02) | -.62 | .33 | 0.0570 | <=.10 |
|  | singleTRUE:sedentaryTRUE | .66 | (.35,1.27) | -.41 | .33 | 0.2170 | > .10 |
|  | singleTRUE:current\_work\_2TRUE | 1.26 | (.5,3.16) | .24 | .47 | 0.6142 | > .10 |
|  | singleTRUE:current\_drinkTRUE | .8 | (.37,1.71) | -.23 | .39 | 0.5613 | > .10 |
|  | poor\_healthTRUE:sedentaryTRUE | 1.09 | (.57,2.11) | .09 | .33 | 0.7878 | > .10 |
|  | poor\_healthTRUE:current\_work\_2TRUE | 1.38 | (.61,3.1) | .32 | .41 | 0.4389 | > .10 |
|  | poor\_healthTRUE:current\_drinkTRUE | .62 | (.29,1.31) | -.48 | .39 | 0.2090 | > .10 |
|  | sedentaryTRUE:current\_work\_2TRUE | 1.25 | (.53,2.99) | .22 | .44 | 0.6182 | > .10 |
|  | sedentaryTRUE:current\_drinkTRUE | 1.43 | (.64,3.15) | .36 | .41 | 0.3738 | > .10 |
|  | current\_work\_2TRUE:current\_drinkTRUE | 1.56 | (.54,4.67) | .45 | .55 | 0.4145 | > .10 |

### best

solution of model **best** fit to data from **satsa** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -5259.315 | 10518.63 | 10548.6 | 10659.9 | 12327 | 12313 | 14 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .13 | (.11,.15) | -2.04 | .07 | 0.0000 | <=.001 |
| \*\*\* | age\_in\_years\_70 | .96 | (.95,.97) | -.04 | .01 | 0.0000 | <=.001 |
| \*\*\* | femaleTRUE | .74 | (.66,.84) | -.3 | .06 | 0.0000 | <=.001 |
| \*\*\* | singleTRUE | 1.6 | (1.4,1.84) | .47 | .07 | 0.0000 | <=.001 |
| \*\*\* | poor\_healthTRUE | 1.39 | (1.22,1.58) | .33 | .07 | 0.0000 | <=.001 |
| \*\*\* | current\_work\_2TRUE | .64 | (.5,.8) | -.45 | .12 | 0.0002 | <=.001 |
| \*\*\* | current\_drinkTRUE | 1.25 | (1.12,1.4) | .22 | .06 | 0.0001 | <=.001 |
|  | singleTRUE:poor\_healthTRUE | .85 | (.68,1.06) | -.17 | .11 | 0.1415 | > .10 |
| \*\* | age\_in\_years\_70:sedentaryTRUE | .99 | (.98,1) | -.01 | 0 | 0.0074 | <=.01 |
| \*\* | femaleTRUE:current\_work\_2TRUE | 1.36 | (1.1,1.67) | .31 | .11 | 0.0037 | <=.01 |
| \*\*\* | current\_drinkTRUE:sedentaryTRUE | 1.54 | (1.32,1.79) | .43 | .08 | 0.0000 | <=.001 |
|  | age\_in\_years\_70:educ3\_f( < HS ) | .99 | (.98,1.01) | -.01 | .01 | 0.3706 | > .10 |
|  | age\_in\_years\_70:educ3\_f( HS < ) | 1.01 | (.99,1.03) | .01 | .01 | 0.3018 | > .10 |
|  | current\_work\_2TRUE:educ3\_f( < HS ) | 1.01 | (.78,1.3) | .01 | .13 | 0.9437 | > .10 |
| . | current\_work\_2TRUE:educ3\_f( HS < ) | .72 | (.5,1.02) | -.33 | .18 | 0.0661 | <=.10 |

## share

### BETWEEN

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| coef\_name | A | B | AA | BB | best |
| (Intercept) | .19(.15,.24)\*\*\* | .18(.13,.24)\*\*\* | .19(.13,.26)\*\*\* | .23(.14,.39)\*\*\* | .13(.11,.15)\*\*\* |
| age\_in\_years\_70 | 1(.99,1.01) | 1(.99,1.01) | .99(.97,1.02) | .98(.95,1.02) |  |
| femaleTRUE | 1.11(.89,1.39) | 1.09(.87,1.37) | 1.07(.7,1.65) | .71(.4,1.26) | .64(.56,.74)\*\*\* |
| educ3\_f( < HS ) | 1(.78,1.29) | 1.03(.8,1.32) | 1.09(.71,1.67) | .58(.32,1.07). | 1.08(.94,1.24) |
| educ3\_f( HS < ) | .84(.64,1.11) | .85(.64,1.12) | .8(.5,1.29) | .78(.4,1.52) | .83(.69,1). |
| singleTRUE | .86(.64,1.13) | .85(.63,1.12) | .74(.37,1.42) | 1.24(.52,2.81) |  |
| poor\_healthTRUE |  | .88(.7,1.11) |  | .86(.48,1.54) | 1.31(1.04,1.65)\* |
| sedentaryTRUE |  | 1.23(.94,1.58) |  | 1.02(.49,2.07) |  |
| current\_work\_2TRUE |  | .94(.72,1.23) |  | .82(.4,1.64) | .63(.51,.77)\*\*\* |
| current\_drinkTRUE |  | 1.45(1.15,1.83)\*\* |  | .75(.39,1.43) |  |
| age\_in\_years\_70:femaleTRUE |  |  | 1(.97,1.02) | 1(.97,1.03) |  |
| age\_in\_years\_70:educ3\_f( < HS ) |  |  | 1.02(.99,1.04) | 1(.97,1.03) |  |
| age\_in\_years\_70:educ3\_f( HS < ) |  |  | 1.01(.98,1.04) | 1(.96,1.04) |  |
| age\_in\_years\_70:singleTRUE |  |  | 1(.97,1.03) | 1(.97,1.03) |  |
| age\_in\_years\_70:poor\_healthTRUE |  |  |  | 1.03(1,1.05). |  |
| age\_in\_years\_70:sedentaryTRUE |  |  |  | 1(.97,1.04) |  |
| age\_in\_years\_70:current\_work\_2TRUE |  |  |  | 1.01(.97,1.05) |  |
| age\_in\_years\_70:current\_drinkTRUE |  |  |  | 1.01(.98,1.04) | 1(.98,1.01) |
| femaleTRUE:educ3\_f( < HS ) |  |  | .93(.55,1.57) | .91(.52,1.59) |  |
| femaleTRUE:educ3\_f( HS < ) |  |  | 1.24(.69,2.22) | 1.22(.68,2.22) |  |
| femaleTRUE:singleTRUE |  |  | .99(.54,1.89) | .95(.5,1.84) |  |
| femaleTRUE:poor\_healthTRUE |  |  |  | 1.31(.79,2.21) |  |
| femaleTRUE:sedentaryTRUE |  |  |  | 1.16(.66,2.04) |  |
| femaleTRUE:current\_work\_2TRUE |  |  |  | 1.46(.81,2.62) |  |
| femaleTRUE:current\_drinkTRUE |  |  |  | 1.43(.87,2.36) | 1.4(1.2,1.64)\*\*\* |
| educ3\_f( < HS ):singleTRUE |  |  | 1.31(.68,2.57) | 1.52(.75,3.12) |  |
| educ3\_f( HS < ):singleTRUE |  |  | 1.13(.52,2.42) | 1.1(.49,2.44) |  |
| educ3\_f( < HS ):poor\_healthTRUE |  |  |  | 2.14(1.22,3.79)\*\* | 1.37(1.08,1.74)\* |
| educ3\_f( HS < ):poor\_healthTRUE |  |  |  | 1.01(.52,1.95) | .92(.65,1.29) |
| educ3\_f( < HS ):sedentaryTRUE |  |  |  | 2.11(1.1,4.09)\* |  |
| educ3\_f( HS < ):sedentaryTRUE |  |  |  | 1.13(.54,2.31) |  |
| educ3\_f( < HS ):current\_work\_2TRUE |  |  |  | .76(.38,1.48) |  |
| educ3\_f( HS < ):current\_work\_2TRUE |  |  |  | .57(.28,1.14) |  |
| educ3\_f( < HS ):current\_drinkTRUE |  |  |  | 1.24(.69,2.23) |  |
| educ3\_f( HS < ):current\_drinkTRUE |  |  |  | 1.5(.82,2.74) |  |
| singleTRUE:poor\_healthTRUE |  |  |  | .47(.24,.91)\* |  |
| singleTRUE:sedentaryTRUE |  |  |  | .48(.2,1.05). | 1.5(1.21,1.87)\*\*\* |
| singleTRUE:current\_work\_2TRUE |  |  |  | .75(.33,1.65) |  |
| singleTRUE:current\_drinkTRUE |  |  |  | 1.13(.61,2.07) |  |
| poor\_healthTRUE:sedentaryTRUE |  |  |  | .49(.27,.9)\* | .71(.57,.88)\*\* |
| poor\_healthTRUE:current\_work\_2TRUE |  |  |  | .91(.49,1.66) |  |
| poor\_healthTRUE:current\_drinkTRUE |  |  |  | 1.03(.6,1.78) |  |
| sedentaryTRUE:current\_work\_2TRUE |  |  |  | 1.41(.74,2.72) |  |
| sedentaryTRUE:current\_drinkTRUE |  |  |  | 1.36(.7,2.6) |  |
| current\_work\_2TRUE:current\_drinkTRUE |  |  |  | 1.93(1.04,3.6)\* | 1.21(.95,1.56) |

### A

solution of model **A** fit to data from **share** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -1115.067 | 2230.134 | 2242.1 | 2277.2 | 2554 | 2549 | 5 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .19 | (.15,.24) | -1.65 | .12 | 0.0000 | <=.001 |
|  | age\_in\_years\_70 | 1 | (.99,1.01) | 0 | .01 | 0.8531 | > .10 |
|  | femaleTRUE | 1.11 | (.89,1.39) | .1 | .11 | 0.3571 | > .10 |
|  | educ3\_f( < HS ) | 1 | (.78,1.29) | 0 | .13 | 0.9787 | > .10 |
|  | educ3\_f( HS < ) | .84 | (.64,1.11) | -.17 | .14 | 0.2177 | > .10 |
|  | singleTRUE | .86 | (.64,1.13) | -.16 | .15 | 0.2816 | > .10 |

### B

solution of model **B** fit to data from **share** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -1109.27 | 2218.539 | 2238.5 | 2297 | 2554 | 2545 | 9 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .18 | (.13,.24) | -1.73 | .15 | 0.0000 | <=.001 |
|  | age\_in\_years\_70 | 1 | (.99,1.01) | 0 | .01 | 0.8845 | > .10 |
|  | femaleTRUE | 1.09 | (.87,1.37) | .09 | .12 | 0.4469 | > .10 |
|  | educ3\_f( < HS ) | 1.03 | (.8,1.32) | .03 | .13 | 0.8397 | > .10 |
|  | educ3\_f( HS < ) | .85 | (.64,1.12) | -.17 | .14 | 0.2371 | > .10 |
|  | singleTRUE | .85 | (.63,1.12) | -.17 | .15 | 0.2554 | > .10 |
|  | poor\_healthTRUE | .88 | (.7,1.11) | -.13 | .12 | 0.2770 | > .10 |
|  | sedentaryTRUE | 1.23 | (.94,1.58) | .21 | .13 | 0.1200 | > .10 |
|  | current\_work\_2TRUE | .94 | (.72,1.23) | -.06 | .14 | 0.6660 | > .10 |
| \*\* | current\_drinkTRUE | 1.45 | (1.15,1.83) | .37 | .12 | 0.0017 | <=.01 |

### AA

solution of model **AA** fit to data from **share** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -1112.934 | 2225.869 | 2255.9 | 2343.6 | 2554 | 2540 | 14 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .19 | (.13,.26) | -1.67 | .17 | 0.0000 | <=.001 |
|  | age\_in\_years\_70 | .99 | (.97,1.02) | -.01 | .01 | 0.5547 | > .10 |
|  | femaleTRUE | 1.07 | (.7,1.65) | .07 | .22 | 0.7611 | > .10 |
|  | educ3\_f( < HS ) | 1.09 | (.71,1.67) | .08 | .22 | 0.7024 | > .10 |
|  | educ3\_f( HS < ) | .8 | (.5,1.29) | -.22 | .24 | 0.3626 | > .10 |
|  | singleTRUE | .74 | (.37,1.42) | -.3 | .34 | 0.3885 | > .10 |
|  | age\_in\_years\_70:femaleTRUE | 1 | (.97,1.02) | 0 | .01 | 0.8562 | > .10 |
|  | age\_in\_years\_70:educ3\_f( < HS ) | 1.02 | (.99,1.04) | .02 | .01 | 0.2182 | > .10 |
|  | age\_in\_years\_70:educ3\_f( HS < ) | 1.01 | (.98,1.04) | .01 | .02 | 0.4082 | > .10 |
|  | age\_in\_years\_70:singleTRUE | 1 | (.97,1.03) | 0 | .01 | 0.9320 | > .10 |
|  | femaleTRUE:educ3\_f( < HS ) | .93 | (.55,1.57) | -.07 | .27 | 0.7840 | > .10 |
|  | femaleTRUE:educ3\_f( HS < ) | 1.24 | (.69,2.22) | .22 | .3 | 0.4643 | > .10 |
|  | femaleTRUE:singleTRUE | .99 | (.54,1.89) | -.01 | .32 | 0.9814 | > .10 |
|  | educ3\_f( < HS ):singleTRUE | 1.31 | (.68,2.57) | .27 | .34 | 0.4224 | > .10 |
|  | educ3\_f( HS < ):singleTRUE | 1.13 | (.52,2.42) | .12 | .39 | 0.7612 | > .10 |

### BB

solution of model **BB** fit to data from **share** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -1084.736 | 2169.472 | 2259.5 | 2522.5 | 2554 | 2510 | 44 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .23 | (.14,.39) | -1.45 | .27 | 0.0000 | <=.001 |
|  | age\_in\_years\_70 | .98 | (.95,1.02) | -.02 | .02 | 0.3026 | > .10 |
|  | femaleTRUE | .71 | (.4,1.26) | -.34 | .29 | 0.2437 | > .10 |
| . | educ3\_f( < HS ) | .58 | (.32,1.07) | -.54 | .31 | 0.0806 | <=.10 |
|  | educ3\_f( HS < ) | .78 | (.4,1.52) | -.24 | .34 | 0.4731 | > .10 |
|  | singleTRUE | 1.24 | (.52,2.81) | .21 | .43 | 0.6213 | > .10 |
|  | poor\_healthTRUE | .86 | (.48,1.54) | -.15 | .3 | 0.6107 | > .10 |
|  | sedentaryTRUE | 1.02 | (.49,2.07) | .02 | .37 | 0.9469 | > .10 |
|  | current\_work\_2TRUE | .82 | (.4,1.64) | -.2 | .36 | 0.5725 | > .10 |
|  | current\_drinkTRUE | .75 | (.39,1.43) | -.28 | .33 | 0.3909 | > .10 |
|  | age\_in\_years\_70:femaleTRUE | 1 | (.97,1.03) | 0 | .01 | 0.9366 | > .10 |
|  | age\_in\_years\_70:educ3\_f( < HS ) | 1 | (.97,1.03) | 0 | .02 | 0.8265 | > .10 |
|  | age\_in\_years\_70:educ3\_f( HS < ) | 1 | (.96,1.04) | 0 | .02 | 0.9352 | > .10 |
|  | age\_in\_years\_70:singleTRUE | 1 | (.97,1.03) | 0 | .02 | 0.9585 | > .10 |
| . | age\_in\_years\_70:poor\_healthTRUE | 1.03 | (1,1.05) | .02 | .01 | 0.0850 | <=.10 |
|  | age\_in\_years\_70:sedentaryTRUE | 1 | (.97,1.04) | 0 | .02 | 0.8840 | > .10 |
|  | age\_in\_years\_70:current\_work\_2TRUE | 1.01 | (.97,1.05) | .01 | .02 | 0.5474 | > .10 |
|  | age\_in\_years\_70:current\_drinkTRUE | 1.01 | (.98,1.04) | .01 | .02 | 0.3921 | > .10 |
|  | femaleTRUE:educ3\_f( < HS ) | .91 | (.52,1.59) | -.09 | .29 | 0.7435 | > .10 |
|  | femaleTRUE:educ3\_f( HS < ) | 1.22 | (.68,2.22) | .2 | .3 | 0.5041 | > .10 |
|  | femaleTRUE:singleTRUE | .95 | (.5,1.84) | -.05 | .33 | 0.8718 | > .10 |
|  | femaleTRUE:poor\_healthTRUE | 1.31 | (.79,2.21) | .27 | .26 | 0.2996 | > .10 |
|  | femaleTRUE:sedentaryTRUE | 1.16 | (.66,2.04) | .15 | .29 | 0.6111 | > .10 |
|  | femaleTRUE:current\_work\_2TRUE | 1.46 | (.81,2.62) | .38 | .3 | 0.2016 | > .10 |
|  | femaleTRUE:current\_drinkTRUE | 1.43 | (.87,2.36) | .36 | .26 | 0.1648 | > .10 |
|  | educ3\_f( < HS ):singleTRUE | 1.52 | (.75,3.12) | .42 | .36 | 0.2490 | > .10 |
|  | educ3\_f( HS < ):singleTRUE | 1.1 | (.49,2.44) | .1 | .41 | 0.8077 | > .10 |
| \*\* | educ3\_f( < HS ):poor\_healthTRUE | 2.14 | (1.22,3.79) | .76 | .29 | 0.0084 | <=.01 |
|  | educ3\_f( HS < ):poor\_healthTRUE | 1.01 | (.52,1.95) | .01 | .34 | 0.9766 | > .10 |
| \* | educ3\_f( < HS ):sedentaryTRUE | 2.11 | (1.1,4.09) | .75 | .33 | 0.0257 | <=.05 |
|  | educ3\_f( HS < ):sedentaryTRUE | 1.13 | (.54,2.31) | .12 | .37 | 0.7489 | > .10 |
|  | educ3\_f( < HS ):current\_work\_2TRUE | .76 | (.38,1.48) | -.28 | .35 | 0.4234 | > .10 |
|  | educ3\_f( HS < ):current\_work\_2TRUE | .57 | (.28,1.14) | -.57 | .36 | 0.1092 | > .10 |
|  | educ3\_f( < HS ):current\_drinkTRUE | 1.24 | (.69,2.23) | .21 | .3 | 0.4766 | > .10 |
|  | educ3\_f( HS < ):current\_drinkTRUE | 1.5 | (.82,2.74) | .41 | .31 | 0.1870 | > .10 |
| \* | singleTRUE:poor\_healthTRUE | .47 | (.24,.91) | -.75 | .34 | 0.0251 | <=.05 |
| . | singleTRUE:sedentaryTRUE | .48 | (.2,1.05) | -.74 | .42 | 0.0775 | <=.10 |
|  | singleTRUE:current\_work\_2TRUE | .75 | (.33,1.65) | -.29 | .41 | 0.4727 | > .10 |
|  | singleTRUE:current\_drinkTRUE | 1.13 | (.61,2.07) | .12 | .31 | 0.7046 | > .10 |
| \* | poor\_healthTRUE:sedentaryTRUE | .49 | (.27,.9) | -.71 | .31 | 0.0222 | <=.05 |
|  | poor\_healthTRUE:current\_work\_2TRUE | .91 | (.49,1.66) | -.09 | .31 | 0.7627 | > .10 |
|  | poor\_healthTRUE:current\_drinkTRUE | 1.03 | (.6,1.78) | .03 | .28 | 0.9063 | > .10 |
|  | sedentaryTRUE:current\_work\_2TRUE | 1.41 | (.74,2.72) | .35 | .33 | 0.2988 | > .10 |
|  | sedentaryTRUE:current\_drinkTRUE | 1.36 | (.7,2.6) | .31 | .33 | 0.3549 | > .10 |
| \* | current\_work\_2TRUE:current\_drinkTRUE | 1.93 | (1.04,3.6) | .66 | .32 | 0.0371 | <=.05 |

### best

solution of model **best** fit to data from **share** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -5259.089 | 10518.18 | 10554.2 | 10687.7 | 12327 | 12310 | 17 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .13 | (.11,.15) | -2.04 | .07 | 0.0000 | <=.001 |
|  | educ3\_f( < HS ) | 1.08 | (.94,1.24) | .08 | .07 | 0.2649 | > .10 |
| . | educ3\_f( HS < ) | .83 | (.69,1) | -.18 | .09 | 0.0500 | <=.10 |
| \*\*\* | femaleTRUE | .64 | (.56,.74) | -.44 | .07 | 0.0000 | <=.001 |
| \* | poor\_healthTRUE | 1.31 | (1.04,1.65) | .27 | .12 | 0.0227 | <=.05 |
| \*\*\* | current\_work\_2TRUE | .63 | (.51,.77) | -.47 | .11 | 0.0000 | <=.001 |
| \*\*\* | poor\_healthFALSE:age\_in\_years\_70 | .96 | (.95,.97) | -.05 | .01 | 0.0000 | <=.001 |
| \*\*\* | poor\_healthTRUE:age\_in\_years\_70 | .96 | (.95,.97) | -.04 | .01 | 0.0000 | <=.001 |
| \*\*\* | poor\_healthFALSE:singleTRUE | 1.69 | (1.45,1.96) | .52 | .08 | 0.0000 | <=.001 |
| \*\*\* | poor\_healthTRUE:singleTRUE | 1.41 | (1.15,1.71) | .34 | .1 | 0.0007 | <=.001 |
| \*\*\* | singleFALSE:sedentaryTRUE | 1.83 | (1.57,2.12) | .6 | .08 | 0.0000 | <=.001 |
| \*\*\* | singleTRUE:sedentaryTRUE | 1.5 | (1.21,1.87) | .41 | .11 | 0.0002 | <=.001 |
| \*\* | poor\_healthTRUE:sedentaryTRUE | .71 | (.57,.88) | -.35 | .11 | 0.0021 | <=.01 |
|  | age\_in\_years\_70:current\_drinkTRUE | 1 | (.98,1.01) | 0 | .01 | 0.4477 | > .10 |
| \*\*\* | femaleTRUE:current\_drinkTRUE | 1.4 | (1.2,1.64) | .34 | .08 | 0.0000 | <=.001 |
|  | current\_work\_2TRUE:current\_drinkTRUE | 1.21 | (.95,1.56) | .19 | .13 | 0.1247 | > .10 |
| \* | educ3\_f( < HS ):poor\_healthTRUE | 1.37 | (1.08,1.74) | .31 | .12 | 0.0107 | <=.05 |
|  | educ3\_f( HS < ):poor\_healthTRUE | .92 | (.65,1.29) | -.08 | .17 | 0.6290 | > .10 |

## tilda

### BETWEEN

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| coef\_name | A | B | AA | BB | best |
| (Intercept) | .11(.09,.13)\*\*\* | .08(.07,.11)\*\*\* | .15(.11,.2)\*\*\* | .07(.04,.12)\*\*\* | .1(.08,.13)\*\*\* |
| age\_in\_years\_70 | .95(.95,.96)\*\*\* | .94(.93,.95)\*\*\* | .97(.95,.99)\*\* | .97(.94,1). |  |
| femaleTRUE | .93(.81,1.07) | .91(.79,1.05) | .65(.47,.9)\* | .78(.49,1.24) | .74(.61,.89)\*\* |
| educ3\_f( < HS ) | 1.27(1.09,1.47)\*\* | 1.18(1.01,1.38)\* | .88(.65,1.2) | 1.26(.79,2.05) |  |
| educ3\_f( HS < ) | .39(.25,.58)\*\*\* | .42(.27,.63)\*\*\* | .47(.22,.91)\* | .16(.02,.75)\* |  |
| singleTRUE | 1.82(1.56,2.12)\*\*\* | 1.8(1.54,2.1)\*\*\* | 1.69(1.17,2.41)\*\* | 1.39(.83,2.31) | 1.51(1.35,1.68)\*\*\* |
| poor\_healthTRUE |  | 1.59(1.35,1.87)\*\*\* |  | 1.85(1.07,3.18)\* | 1.35(1.19,1.53)\*\*\* |
| sedentaryTRUE |  | 1.54(1.29,1.83)\*\*\* |  | 2.3(1.28,4.09)\*\* | 1.53(1.37,1.7)\*\*\* |
| current\_work\_2TRUE |  | .64(.54,.76)\*\*\* |  | .88(.49,1.59) | .77(.67,.9)\*\*\* |
| current\_drinkTRUE |  | 1.36(1.16,1.61)\*\*\* |  | 2.09(1.29,3.46)\*\* | 1.46(1.21,1.77)\*\*\* |
| age\_in\_years\_70:femaleTRUE |  |  | .98(.96,1)\* | .98(.96,1)\* |  |
| age\_in\_years\_70:educ3\_f( < HS ) |  |  | .99(.97,1.01) | .99(.97,1.01) |  |
| age\_in\_years\_70:educ3\_f( HS < ) |  |  | 1.02(.97,1.07) | 1.03(.97,1.09) |  |
| age\_in\_years\_70:singleTRUE |  |  | .99(.98,1.01) | 1(.98,1.02) |  |
| age\_in\_years\_70:poor\_healthTRUE |  |  |  | .98(.96,1) |  |
| age\_in\_years\_70:sedentaryTRUE |  |  |  | 1.01(.99,1.04) |  |
| age\_in\_years\_70:current\_work\_2TRUE |  |  |  | 1(.98,1.03) |  |
| age\_in\_years\_70:current\_drinkTRUE |  |  |  | .99(.97,1.01) |  |
| femaleTRUE:educ3\_f( < HS ) |  |  | 1.49(1.1,2.03)\* | 1.3(.94,1.79) | 1.17(.95,1.45) |
| femaleTRUE:educ3\_f( HS < ) |  |  | .94(.36,2.38) | .95(.36,2.47) | .85(.63,1.14) |
| femaleTRUE:singleTRUE |  |  | .81(.59,1.1) | .86(.62,1.19) |  |
| femaleTRUE:poor\_healthTRUE |  |  |  | 1.01(.71,1.43) |  |
| femaleTRUE:sedentaryTRUE |  |  |  | .94(.65,1.36) |  |
| femaleTRUE:current\_work\_2TRUE |  |  |  | 1.01(.71,1.44) |  |
| femaleTRUE:current\_drinkTRUE |  |  |  | .79(.55,1.12) |  |
| educ3\_f( < HS ):singleTRUE |  |  | 1.29(.92,1.82) | 1.32(.93,1.89) |  |
| educ3\_f( HS < ):singleTRUE |  |  | 1.16(.46,2.81) | 1.34(.51,3.38) |  |
| educ3\_f( < HS ):poor\_healthTRUE |  |  |  | 1.06(.72,1.57) |  |
| educ3\_f( HS < ):poor\_healthTRUE |  |  |  | 1.63(.45,5.1) |  |
| educ3\_f( < HS ):sedentaryTRUE |  |  |  | .84(.56,1.26) |  |
| educ3\_f( HS < ):sedentaryTRUE |  |  |  | 2.02(.67,5.72) |  |
| educ3\_f( < HS ):current\_work\_2TRUE |  |  |  | .88(.62,1.26) |  |
| educ3\_f( HS < ):current\_work\_2TRUE |  |  |  | 1.53(.54,4.48) |  |
| educ3\_f( < HS ):current\_drinkTRUE |  |  |  | .64(.43,.95)\* |  |
| educ3\_f( HS < ):current\_drinkTRUE |  |  |  | 2.1(.51,14.64) |  |
| singleTRUE:poor\_healthTRUE |  |  |  | 1.03(.72,1.48) |  |
| singleTRUE:sedentaryTRUE |  |  |  | 1.08(.72,1.61) |  |
| singleTRUE:current\_work\_2TRUE |  |  |  | .98(.67,1.43) |  |
| singleTRUE:current\_drinkTRUE |  |  |  | 1.21(.84,1.76) |  |
| poor\_healthTRUE:sedentaryTRUE |  |  |  | .76(.51,1.12) |  |
| poor\_healthTRUE:current\_work\_2TRUE |  |  |  | .63(.41,.96)\* | .79(.6,1.04) |
| poor\_healthTRUE:current\_drinkTRUE |  |  |  | .78(.54,1.14) |  |
| sedentaryTRUE:current\_work\_2TRUE |  |  |  | .96(.61,1.48) |  |
| sedentaryTRUE:current\_drinkTRUE |  |  |  | .88(.59,1.32) |  |
| current\_work\_2TRUE:current\_drinkTRUE |  |  |  | .91(.6,1.41) |  |

### A

solution of model **A** fit to data from **tilda** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -2588.705 | 5177.409 | 5189.4 | 5229.4 | 5844 | 5839 | 5 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .11 | (.09,.13) | -2.19 | .09 | 0.0000 | <=.001 |
| \*\*\* | age\_in\_years\_70 | .95 | (.95,.96) | -.05 | 0 | 0.0000 | <=.001 |
|  | femaleTRUE | .93 | (.81,1.07) | -.07 | .07 | 0.3197 | > .10 |
| \*\* | educ3\_f( < HS ) | 1.27 | (1.09,1.47) | .24 | .08 | 0.0023 | <=.01 |
| \*\*\* | educ3\_f( HS < ) | .39 | (.25,.58) | -.94 | .21 | 0.0000 | <=.001 |
| \*\*\* | singleTRUE | 1.82 | (1.56,2.12) | .6 | .08 | 0.0000 | <=.001 |

### B

solution of model **B** fit to data from **tilda** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -2535.063 | 5070.126 | 5090.1 | 5156.9 | 5844 | 5835 | 9 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .08 | (.07,.11) | -2.48 | .12 | 0.0000 | <=.001 |
| \*\*\* | age\_in\_years\_70 | .94 | (.93,.95) | -.06 | 0 | 0.0000 | <=.001 |
|  | femaleTRUE | .91 | (.79,1.05) | -.09 | .07 | 0.2090 | > .10 |
| \* | educ3\_f( < HS ) | 1.18 | (1.01,1.38) | .16 | .08 | 0.0362 | <=.05 |
| \*\*\* | educ3\_f( HS < ) | .42 | (.27,.63) | -.86 | .21 | 0.0000 | <=.001 |
| \*\*\* | singleTRUE | 1.8 | (1.54,2.1) | .59 | .08 | 0.0000 | <=.001 |
| \*\*\* | poor\_healthTRUE | 1.59 | (1.35,1.87) | .46 | .08 | 0.0000 | <=.001 |
| \*\*\* | sedentaryTRUE | 1.54 | (1.29,1.83) | .43 | .09 | 0.0000 | <=.001 |
| \*\*\* | current\_work\_2TRUE | .64 | (.54,.76) | -.44 | .08 | 0.0000 | <=.001 |
| \*\*\* | current\_drinkTRUE | 1.36 | (1.16,1.61) | .31 | .08 | 0.0003 | <=.001 |

### AA

solution of model **AA** fit to data from **tilda** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -2578.473 | 5156.947 | 5186.9 | 5287 | 5844 | 5830 | 14 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .15 | (.11,.2) | -1.89 | .14 | 0.0000 | <=.001 |
| \*\* | age\_in\_years\_70 | .97 | (.95,.99) | -.03 | .01 | 0.0015 | <=.01 |
| \* | femaleTRUE | .65 | (.47,.9) | -.43 | .17 | 0.0102 | <=.05 |
|  | educ3\_f( < HS ) | .88 | (.65,1.2) | -.13 | .16 | 0.4142 | > .10 |
| \* | educ3\_f( HS < ) | .47 | (.22,.91) | -.76 | .36 | 0.0344 | <=.05 |
| \*\* | singleTRUE | 1.69 | (1.17,2.41) | .52 | .18 | 0.0045 | <=.01 |
| \* | age\_in\_years\_70:femaleTRUE | .98 | (.96,1) | -.02 | .01 | 0.0133 | <=.05 |
|  | age\_in\_years\_70:educ3\_f( < HS ) | .99 | (.97,1.01) | -.01 | .01 | 0.4150 | > .10 |
|  | age\_in\_years\_70:educ3\_f( HS < ) | 1.02 | (.97,1.07) | .02 | .03 | 0.3972 | > .10 |
|  | age\_in\_years\_70:singleTRUE | .99 | (.98,1.01) | -.01 | .01 | 0.5054 | > .10 |
| \* | femaleTRUE:educ3\_f( < HS ) | 1.49 | (1.1,2.03) | .4 | .16 | 0.0100 | <=.05 |
|  | femaleTRUE:educ3\_f( HS < ) | .94 | (.36,2.38) | -.06 | .48 | 0.8950 | > .10 |
|  | femaleTRUE:singleTRUE | .81 | (.59,1.1) | -.21 | .16 | 0.1793 | > .10 |
|  | educ3\_f( < HS ):singleTRUE | 1.29 | (.92,1.82) | .25 | .17 | 0.1442 | > .10 |
|  | educ3\_f( HS < ):singleTRUE | 1.16 | (.46,2.81) | .15 | .46 | 0.7476 | > .10 |

### BB

solution of model **BB** fit to data from **tilda** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -2512.134 | 5024.269 | 5114.3 | 5414.6 | 5844 | 5800 | 44 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .07 | (.04,.12) | -2.62 | .27 | 0.0000 | <=.001 |
| . | age\_in\_years\_70 | .97 | (.94,1) | -.03 | .02 | 0.0917 | <=.10 |
|  | femaleTRUE | .78 | (.49,1.24) | -.25 | .24 | 0.2971 | > .10 |
|  | educ3\_f( < HS ) | 1.26 | (.79,2.05) | .23 | .24 | 0.3410 | > .10 |
| \* | educ3\_f( HS < ) | .16 | (.02,.75) | -1.82 | .88 | 0.0393 | <=.05 |
|  | singleTRUE | 1.39 | (.83,2.31) | .33 | .26 | 0.2045 | > .10 |
| \* | poor\_healthTRUE | 1.85 | (1.07,3.18) | .61 | .28 | 0.0268 | <=.05 |
| \*\* | sedentaryTRUE | 2.3 | (1.28,4.09) | .83 | .3 | 0.0048 | <=.01 |
|  | current\_work\_2TRUE | .88 | (.49,1.59) | -.12 | .3 | 0.6828 | > .10 |
| \*\* | current\_drinkTRUE | 2.09 | (1.29,3.46) | .74 | .25 | 0.0035 | <=.01 |
| \* | age\_in\_years\_70:femaleTRUE | .98 | (.96,1) | -.02 | .01 | 0.0156 | <=.05 |
|  | age\_in\_years\_70:educ3\_f( < HS ) | .99 | (.97,1.01) | -.01 | .01 | 0.2212 | > .10 |
|  | age\_in\_years\_70:educ3\_f( HS < ) | 1.03 | (.97,1.09) | .03 | .03 | 0.3278 | > .10 |
|  | age\_in\_years\_70:singleTRUE | 1 | (.98,1.02) | 0 | .01 | 0.8225 | > .10 |
|  | age\_in\_years\_70:poor\_healthTRUE | .98 | (.96,1) | -.02 | .01 | 0.1056 | > .10 |
|  | age\_in\_years\_70:sedentaryTRUE | 1.01 | (.99,1.04) | .01 | .01 | 0.2551 | > .10 |
|  | age\_in\_years\_70:current\_work\_2TRUE | 1 | (.98,1.03) | 0 | .01 | 0.7688 | > .10 |
|  | age\_in\_years\_70:current\_drinkTRUE | .99 | (.97,1.01) | -.01 | .01 | 0.2739 | > .10 |
|  | femaleTRUE:educ3\_f( < HS ) | 1.3 | (.94,1.79) | .26 | .16 | 0.1142 | > .10 |
|  | femaleTRUE:educ3\_f( HS < ) | .95 | (.36,2.47) | -.05 | .49 | 0.9189 | > .10 |
|  | femaleTRUE:singleTRUE | .86 | (.62,1.19) | -.15 | .16 | 0.3658 | > .10 |
|  | femaleTRUE:poor\_healthTRUE | 1.01 | (.71,1.43) | .01 | .18 | 0.9472 | > .10 |
|  | femaleTRUE:sedentaryTRUE | .94 | (.65,1.36) | -.06 | .19 | 0.7424 | > .10 |
|  | femaleTRUE:current\_work\_2TRUE | 1.01 | (.71,1.44) | .01 | .18 | 0.9528 | > .10 |
|  | femaleTRUE:current\_drinkTRUE | .79 | (.55,1.12) | -.24 | .18 | 0.1921 | > .10 |
|  | educ3\_f( < HS ):singleTRUE | 1.32 | (.93,1.89) | .28 | .18 | 0.1226 | > .10 |
|  | educ3\_f( HS < ):singleTRUE | 1.34 | (.51,3.38) | .29 | .48 | 0.5412 | > .10 |
|  | educ3\_f( < HS ):poor\_healthTRUE | 1.06 | (.72,1.57) | .06 | .2 | 0.7747 | > .10 |
|  | educ3\_f( HS < ):poor\_healthTRUE | 1.63 | (.45,5.1) | .49 | .61 | 0.4254 | > .10 |
|  | educ3\_f( < HS ):sedentaryTRUE | .84 | (.56,1.26) | -.17 | .21 | 0.3957 | > .10 |
|  | educ3\_f( HS < ):sedentaryTRUE | 2.02 | (.67,5.72) | .71 | .54 | 0.1928 | > .10 |
|  | educ3\_f( < HS ):current\_work\_2TRUE | .88 | (.62,1.26) | -.13 | .18 | 0.4885 | > .10 |
|  | educ3\_f( HS < ):current\_work\_2TRUE | 1.53 | (.54,4.48) | .43 | .54 | 0.4264 | > .10 |
| \* | educ3\_f( < HS ):current\_drinkTRUE | .64 | (.43,.95) | -.45 | .2 | 0.0273 | <=.05 |
|  | educ3\_f( HS < ):current\_drinkTRUE | 2.1 | (.51,14.64) | .74 | .82 | 0.3667 | > .10 |
|  | singleTRUE:poor\_healthTRUE | 1.03 | (.72,1.48) | .03 | .18 | 0.8577 | > .10 |
|  | singleTRUE:sedentaryTRUE | 1.08 | (.72,1.61) | .08 | .21 | 0.7149 | > .10 |
|  | singleTRUE:current\_work\_2TRUE | .98 | (.67,1.43) | -.02 | .19 | 0.9173 | > .10 |
|  | singleTRUE:current\_drinkTRUE | 1.21 | (.84,1.76) | .19 | .19 | 0.3114 | > .10 |
|  | poor\_healthTRUE:sedentaryTRUE | .76 | (.51,1.12) | -.28 | .2 | 0.1601 | > .10 |
| \* | poor\_healthTRUE:current\_work\_2TRUE | .63 | (.41,.96) | -.46 | .22 | 0.0325 | <=.05 |
|  | poor\_healthTRUE:current\_drinkTRUE | .78 | (.54,1.14) | -.24 | .19 | 0.2023 | > .10 |
|  | sedentaryTRUE:current\_work\_2TRUE | .96 | (.61,1.48) | -.04 | .22 | 0.8447 | > .10 |
|  | sedentaryTRUE:current\_drinkTRUE | .88 | (.59,1.32) | -.13 | .21 | 0.5315 | > .10 |
|  | current\_work\_2TRUE:current\_drinkTRUE | .91 | (.6,1.41) | -.09 | .22 | 0.6784 | > .10 |

### best

solution of model **best** fit to data from **tilda** study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| logLik | dev | AIC | BIC | df\_Null | df\_Model | df\_drop |
| -5254.911 | 10509.82 | 10543.8 | 10670 | 12327 | 12311 | 16 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| sign | coef\_name | odds | odds\_ci | est | se | p | sign\_ |
| \*\*\* | (Intercept) | .1 | (.08,.13) | -2.26 | .11 | 0.0000 | <=.001 |
| \*\* | femaleTRUE | .74 | (.61,.89) | -.31 | .1 | 0.0016 | <=.01 |
| \*\*\* | singleTRUE | 1.51 | (1.35,1.68) | .41 | .06 | 0.0000 | <=.001 |
| \*\*\* | poor\_healthTRUE | 1.35 | (1.19,1.53) | .3 | .06 | 0.0000 | <=.001 |
| \*\*\* | sedentaryTRUE | 1.53 | (1.37,1.7) | .42 | .05 | 0.0000 | <=.001 |
| \*\*\* | current\_work\_2TRUE | .77 | (.67,.9) | -.26 | .08 | 0.0007 | <=.001 |
| \*\*\* | current\_drinkTRUE | 1.46 | (1.21,1.77) | .38 | .1 | 0.0001 | <=.001 |
| \*\*\* | femaleFALSE:age\_in\_years\_70 | .96 | (.96,.97) | -.04 | 0 | 0.0000 | <=.001 |
| \*\*\* | femaleTRUE:age\_in\_years\_70 | .95 | (.94,.96) | -.05 | 0 | 0.0000 | <=.001 |
|  | poor\_healthTRUE:age\_in\_years\_70 | 1 | (.99,1.01) | 0 | .01 | 0.5072 | > .10 |
|  | poor\_healthTRUE:current\_work\_2TRUE | .79 | (.6,1.04) | -.23 | .14 | 0.1001 | > .10 |
| . | femaleFALSE:educ3\_f( < HS ) | 1.22 | (.96,1.55) | .2 | .12 | 0.0987 | <=.10 |
|  | femaleTRUE:educ3\_f( < HS ) | 1.17 | (.95,1.45) | .16 | .11 | 0.1384 | > .10 |
|  | femaleFALSE:educ3\_f( HS < ) | .8 | (.59,1.1) | -.22 | .16 | 0.1726 | > .10 |
|  | femaleTRUE:educ3\_f( HS < ) | .85 | (.63,1.14) | -.16 | .15 | 0.2884 | > .10 |
|  | current\_drinkTRUE:educ3\_f( < HS ) | 1.02 | (.81,1.3) | .02 | .12 | 0.8451 | > .10 |
|  | current\_drinkTRUE:educ3\_f( HS < ) | .96 | (.7,1.33) | -.04 | .17 | 0.8151 | > .10 |

# session

sessionInfo()

R version 3.2.5 (2016-04-14)  
Platform: x86\_64-w64-mingw32/x64 (64-bit)  
Running under: Windows 10 x64 (build 10586)  
  
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 magrittr\_1.5 knitr\_1.12.3   
  
loaded via a namespace (and not attached):  
 [1] Rcpp\_0.12.5 munsell\_0.4.3 testit\_0.5 colorspace\_1.2-6 R6\_2.1.2 stringr\_1.0.0   
 [7] highr\_0.5.1 plyr\_1.8.3 dplyr\_0.4.3 tools\_3.2.5 parallel\_3.2.5 grid\_3.2.5   
[13] gtable\_0.2.0 DBI\_0.4-1 htmltools\_0.3.5 yaml\_2.1.13 digest\_0.6.9 assertthat\_0.1   
[19] formatR\_1.3 tidyr\_0.4.1 evaluate\_0.9 rmarkdown\_0.9.6 stringi\_1.0-1 scales\_0.4.0