

TITLE:

EXAMPLE SYNTAX FOR AIM 2
Piece-wise latent growth curve model of binge drinking frequency
With cohort polynomials included as age-varying predictors of binge drinking indicators
With estimates of direct and indirect effects (via social roles and MLDA) of cohort
Gender included as grouping variable
Model constraint command used to estimate gender differences

DATA:

FILE IS [FILE NAME HERE]
Format is [FORMAT STATEMENT HERE];

VARIABLE:

NAMES ARE
Freq18 Freq20 Freq22 Freq24 Freq26 Freq28 Freq30 !Age specific indicators of binge drinking frequency
Lcohort Qcohort !Cohort polynomial predictors
gender !Gender grouping variable
fu6atrtf !Attrition Weight
marr18 marr20 marr22 marr24 marr26 marr28 marr30 !Age specific measures of marriage
work20 work22 work24 work26 work28 work30 !Age specific measures of full-time employment; age 18 not available
coll20 coll22 coll24 coll26 coll28 coll30 !Age specific measures of full-time college; age 18 not available
pare18 pare20 pare22 pare24 pare26 pare28 pare30 !Age specific measures of parental status
resi18 resi20 resi22 resi24 resi26 resi28 resind !Age specific measures of residential independence
mlda18 mlda20 mlda22 mlda24 mlda26 mlda28 mlda30; !Age specific measures of MLDA; age 30 not available due to insufficient variance

GROUPING IS GENDER (0 = male 1 = female);

USEVAR Freq18 Freq20 Freq22 Freq24 Freq26 Freq28 Freq30
Lcohort Qcohort
gender
marr18 marr20 marr22 marr24 marr26 marr28 marr30
work20 work22 work24 work26 work28 work30
coll20 coll22 coll24 coll26 coll28 coll30
pare18 pare20 pare22 pare24 pare26 pare28 pare30
resi18 resi20 resi22 resi24 resi26 resi28 resind
mlda18 mlda20 mlda22 mlda24 mlda26 mlda28 mlda30;

MISSING ARE .;

Weight is fu6atrtf;

ANALYSIS:

TYPE = MEANSTRUCTURE MISSING H1;
ESTIMATOR = MLR;
ITERATIONS = 100000;
COVERAGE = .05;

MODEL:

!Specification of growth factors

IBINGE BY Freq18@1 Freq20@1 Freq22@1 Freq24@1
Freq26@1 Freq28@1 Freq30@1;

L1BINGE BY Freq18@0 Freq20@1 Freq22@2 Freq24@2
Freq26@2 Freq28@2 Freq30@2;

L2BINGE BY Freq18@0 Freq20@0 Freq22@0 Freq24@1
Freq26@2 Freq28@2 Freq30@2;

L3BINGE BY Freq18@0 Freq20@0 Freq22@0 Freq24@0
Freq26@0 Freq28@1 Freq30@2;

[IBINGE];
[L1BINGE];
[L2BINGE];
[L3BINGE];

IBINGE;
L1BINGE;
L2BINGE;
L3BINGE;

!Covariances among growth factors

IBINGE with L1BINGE;
IBINGE with L2BINGE;
IBINGE with L3BINGE;

L1BINGE with L2BINGE;
L1BINGE with L3BINGE;

L2BINGE with L3BINGE;

!Specifying cohort as predictor of growth factors

[Lcohort];
Lcohort;

[Qcohort];

Qcohort;

Lcohort with Qcohort;

Freq18 on Lcohort;
Freq20 on Lcohort;
Freq22 on Lcohort;
Freq24 on Lcohort;
Freq26 on Lcohort;
Freq28 on Lcohort;
Freq30 on Lcohort;

Freq18 on Qcohort;
Freq20 on Qcohort;
Freq22 on Qcohort;
Freq24 on Qcohort;
Freq26 on Qcohort;
Freq28 on Qcohort;
Freq30 on Qcohort;

!Specifying roles as time-varying predictors

[marr18]; [marr20]; [marr22]; [marr24];
[marr26]; [marr28]; [marr30];
marr18; marr20; marr22; marr24; marr26; marr28; marr30;

marr18 on Lcohort;
marr20 on Lcohort;
marr22 on Lcohort;
marr24 on Lcohort;
marr26 on Lcohort;
marr28 on Lcohort;
marr30 on Lcohort;

marr18 on Qcohort;
marr20 on Qcohort;
marr22 on Qcohort;
marr24 on Qcohort;
marr26 on Qcohort;
marr28 on Qcohort;
marr30 on Qcohort;

Freq18 on marr18;
Freq20 on marr20;
Freq22 on marr22;
Freq24 on marr24;
Freq26 on marr26;
Freq28 on marr28;
Freq30 on marr30;

marr18 with marr20 marr22 marr24 marr26 marr28 marr30;
marr20 with marr22 marr24 marr26 marr28 marr30;
marr22 with marr24 marr26 marr28 marr30;
marr24 with marr26 marr28 marr30;
marr26 with marr28 marr30;
marr28 with marr30;

[work20]; [work22]; [work24];
[work26]; [work28]; [work30];
work20; work22; work24; work26; work28; work30;

work20 on Lcohort;
work22 on Lcohort;
work24 on Lcohort;
work26 on Lcohort;
work28 on Lcohort;
work30 on Lcohort;

work20 on Qcohort;
work22 on Qcohort;
work24 on Qcohort;
work26 on Qcohort;
work28 on Qcohort;
work30 on Qcohort;

Freq20 on work20;
Freq22 on work22;
Freq24 on work24;
Freq26 on work26;
Freq28 on work28;
Freq30 on work30;

work20 with work22 work24 work26 work28 work30;
work22 with work24 work26 work28 work30;
work24 with work26 work28 work30;
work26 with work28 work30;
work28 with work30;

work20 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work22 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work24 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work26 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work28 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work30 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

[coll20]; [coll22]; [coll24];

[coll126]; [coll128]; [coll130];
coll120; coll122; coll124; coll126; coll128; coll130;

coll120 on Lcohort;
coll122 on Lcohort;
coll124 on Lcohort;
coll126 on Lcohort;
coll128 on Lcohort;
coll130 on Lcohort;

coll120 on Qcohort;
coll122 on Qcohort;
coll124 on Qcohort;
coll126 on Qcohort;
coll128 on Qcohort;
coll130 on Qcohort;

Freq20 on coll120;
Freq22 on coll122;
Freq24 on coll124;
Freq26 on coll126;
Freq28 on coll128;
Freq30 on coll130;

coll120 with coll122 coll124 coll126 coll128 coll130;
coll122 with coll124 coll126 coll128 coll130;
coll124 with coll126 coll128 coll130;
coll126 with coll128 coll130;
coll128 with coll130;

coll120 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
coll122 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
coll124 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
coll126 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
coll128 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
coll130 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

coll120 with work20 work22 work24 work26 work28 work30;
coll122 with work20 work22 work24 work26 work28 work30;
coll124 with work20 work22 work24 work26 work28 work30;
coll126 with work20 work22 work24 work26 work28 work30;
coll128 with work20 work22 work24 work26 work28 work30;
coll130 with work20 work22 work24 work26 work28 work30;

[pare18]; [pare20]; [pare22]; [pare24];
[pare26]; [pare28]; [pare30];
pare18; pare20; pare22; pare24; pare26; pare28; pare30;

pare18 on Lcohort;
pare20 on Lcohort;
pare22 on Lcohort;
pare24 on Lcohort;
pare26 on Lcohort;
pare28 on Lcohort;
pare30 on Lcohort;

pare18 on Qcohort;
pare20 on Qcohort;
pare22 on Qcohort;
pare24 on Qcohort;
pare26 on Qcohort;
pare28 on Qcohort;
pare30 on Qcohort;

Freq18 on pare18;
Freq20 on pare20;
Freq22 on pare22;
Freq24 on pare24;
Freq26 on pare26;
Freq28 on pare28;
Freq30 on pare30;

pare18 with pare20 pare22 pare24 pare26 pare28 pare30;
pare20 with pare22 pare24 pare26 pare28 pare30;
pare22 with pare24 pare26 pare28 pare30;
pare24 with pare26 pare28 pare30;
pare26 with pare28 pare30;
pare28 with pare30;

pare18 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare20 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare22 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare24 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare26 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare28 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare30 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

pare18 with work20 work22 work24 work26 work28 work30;
pare20 with work20 work22 work24 work26 work28 work30;
pare22 with work20 work22 work24 work26 work28 work30;
pare24 with work20 work22 work24 work26 work28 work30;
pare26 with work20 work22 work24 work26 work28 work30;
pare28 with work20 work22 work24 work26 work28 work30;
pare30 with work20 work22 work24 work26 work28 work30;

pare18 with coll20 coll22 coll24 coll26 coll28 coll30;

pare20 with coll20 coll22 coll24 coll26 coll28 coll30;
pare22 with coll20 coll22 coll24 coll26 coll28 coll30;
pare24 with coll20 coll22 coll24 coll26 coll28 coll30;
pare26 with coll20 coll22 coll24 coll26 coll28 coll30;
pare28 with coll20 coll22 coll24 coll26 coll28 coll30;
pare30 with coll20 coll22 coll24 coll26 coll28 coll30;

[resi18]; [resi20]; [resi22]; [resi24];
[resi26]; [resi28]; [resi30];
resi18; resi20; resi22; resi24; resi26; resi28; resi30;

resi18 on Lcohort;
resi20 on Lcohort;
resi22 on Lcohort;
resi24 on Lcohort;
resi26 on Lcohort;
resi28 on Lcohort;
resi30 on Lcohort;

resi18 on Qcohort;
resi20 on Qcohort;
resi22 on Qcohort;
resi24 on Qcohort;
resi26 on Qcohort;
resi28 on Qcohort;
resi30 on Qcohort;

Freq18 on resi18;
Freq20 on resi20;
Freq22 on resi22;
Freq24 on resi24;
Freq26 on resi26;
Freq28 on resi28;
Freq30 on resi30;

resi18 with resi20 resi22 resi24 resi26 resi28 resi30;
resi20 with resi22 resi24 resi26 resi28 resi30;
resi22 with resi24 resi26 resi28 resi30;
resi24 with resi26 resi28 resi30;
resi26 with resi28 resi30;
resi28 with resi30;

resi18 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
resi20 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
resi22 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
resi24 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
resi26 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
resi28 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
resi30 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

resi18 with work20 work22 work24 work26 work28 work30;
resi20 with work20 work22 work24 work26 work28 work30;
resi22 with work20 work22 work24 work26 work28 work30;
resi24 with work20 work22 work24 work26 work28 work30;
resi26 with work20 work22 work24 work26 work28 work30;
resi28 with work20 work22 work24 work26 work28 work30;
resi30 with work20 work22 work24 work26 work28 work30;

resi18 with coll20 coll22 coll24 coll26 coll28 coll30;
resi20 with coll20 coll22 coll24 coll26 coll28 coll30;
resi22 with coll20 coll22 coll24 coll26 coll28 coll30;
resi24 with coll20 coll22 coll24 coll26 coll28 coll30;
resi26 with coll20 coll22 coll24 coll26 coll28 coll30;
resi28 with coll20 coll22 coll24 coll26 coll28 coll30;
resi30 with coll20 coll22 coll24 coll26 coll28 coll30;

resi18 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
resi20 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
resi22 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
resi24 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
resi26 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
resi28 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
resi30 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;

[mla18]; [mla20]; [mla22]; [mla24];
[mla26]; [mla28];
mla18; mla20; mla22; mla24; mla26; mla28;

mla18 on Lcohort;
mla20 on Lcohort;
mla22 on Lcohort;
mla24 on Lcohort;
mla26 on Lcohort;
mla28 on Lcohort;

mla18 on Qcohort;
mla20 on Qcohort;
mla22 on Qcohort;
mla24 on Qcohort;
mla26 on Qcohort;
mla28 on Qcohort;

Freq18 on mla18;
Freq20 on mla20;
Freq22 on mla22;
Freq24 on mla24;
Freq26 on mla26;

Freq28 on mlda28;

mlda18 with mlda20 mlda22 mlda24 mlda26 mlda28;
mlda20 with mlda22 mlda24 mlda26 mlda28;
mlda22 with mlda24 mlda26 mlda28;
mlda24 with mlda26 mlda28;
mlda26 with mlda28;

mlda18 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
mlda20 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
mlda22 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
mlda24 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
mlda26 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
mlda28 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

mlda18 with work20 work22 work24 work26 work28 work30;
mlda20 with work20 work22 work24 work26 work28 work30;
mlda22 with work20 work22 work24 work26 work28 work30;
mlda24 with work20 work22 work24 work26 work28 work30;
mlda26 with work20 work22 work24 work26 work28 work30;
mlda28 with work20 work22 work24 work26 work28 work30;

mlda18 with coll20 coll22 coll24 coll26 coll28 coll30;
mlda20 with coll20 coll22 coll24 coll26 coll28 coll30;
mlda22 with coll20 coll22 coll24 coll26 coll28 coll30;
mlda24 with coll20 coll22 coll24 coll26 coll28 coll30;
mlda26 with coll20 coll22 coll24 coll26 coll28 coll30;
mlda28 with coll20 coll22 coll24 coll26 coll28 coll30;

mlda18 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
mlda20 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
mlda22 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
mlda24 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
mlda26 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
mlda28 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;

mlda18 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;
mlda20 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;
mlda22 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;
mlda24 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;
mlda26 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;
mlda28 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;

!Specifying variances and means of growth factor indicators
Freq18;
Freq20;
Freq22;
Freq24;

Freq26;
Freq28;
Freq30;

[Freq18@0];
[Freq20@0];
[Freq22@0];
[Freq24@0];
[Freq26@0];
[Freq28@0];
[Freq30@0];

Lcohort WITH IBINGE@0;
Lcohort WITH L1BINGE@0;
Lcohort WITH L2BINGE@0;
Lcohort WITH L3BINGE@0;

rQCOHORT WITH IBINGE@0;
rQCOHORT WITH L1BINGE@0;
rQCOHORT WITH L2BINGE@0;
rQCOHORT WITH L3BINGE@0;

marr18 WITH IBINGE@0;
marr18 WITH L1BINGE@0;
marr18 WITH L2BINGE@0;
marr18 WITH L3BINGE@0;

marr20 WITH IBINGE@0;
marr20 WITH L1BINGE@0;
marr20 WITH L2BINGE@0;
marr20 WITH L3BINGE@0;

marr22 WITH IBINGE@0;
marr22 WITH L1BINGE@0;
marr22 WITH L2BINGE@0;
marr22 WITH L3BINGE@0;

marr24 WITH IBINGE@0;
marr24 WITH L1BINGE@0;
marr24 WITH L2BINGE@0;
marr24 WITH L3BINGE@0;

marr26 WITH IBINGE@0;
marr26 WITH L1BINGE@0;
marr26 WITH L2BINGE@0;
marr26 WITH L3BINGE@0;

marr28 WITH IBINGE@0;
marr28 WITH L1BINGE@0;
marr28 WITH L2BINGE@0;

marr28 WITH L3BINGE@0;

marr30 WITH IBINGE@0;
marr30 WITH L1BINGE@0;
marr30 WITH L2BINGE@0;
marr30 WITH L3BINGE@0;

work20 WITH IBINGE@0;
work20 WITH L1BINGE@0;
work20 WITH L2BINGE@0;
work20 WITH L3BINGE@0;

work22 WITH IBINGE@0;
work22 WITH L1BINGE@0;
work22 WITH L2BINGE@0;
work22 WITH L3BINGE@0;

work24 WITH IBINGE@0;
work24 WITH L1BINGE@0;
work24 WITH L2BINGE@0;
work24 WITH L3BINGE@0;

work26 WITH IBINGE@0;
work26 WITH L1BINGE@0;
work26 WITH L2BINGE@0;
work26 WITH L3BINGE@0;

work28 WITH IBINGE@0;
work28 WITH L1BINGE@0;
work28 WITH L2BINGE@0;
work28 WITH L3BINGE@0;

work30 WITH IBINGE@0;
work30 WITH L1BINGE@0;
work30 WITH L2BINGE@0;
work30 WITH L3BINGE@0;

coll20 WITH IBINGE@0;
coll20 WITH L1BINGE@0;
coll20 WITH L2BINGE@0;
coll20 WITH L3BINGE@0;

coll22 WITH IBINGE@0;
coll22 WITH L1BINGE@0;
coll22 WITH L2BINGE@0;
coll22 WITH L3BINGE@0;

coll24 WITH IBINGE@0;
coll24 WITH L1BINGE@0;
coll24 WITH L2BINGE@0;

coll124 WITH L3BINGE@0;

coll126 WITH IBINGE@0;
coll126 WITH L1BINGE@0;
coll126 WITH L2BINGE@0;
coll126 WITH L3BINGE@0;

coll128 WITH IBINGE@0;
coll128 WITH L1BINGE@0;
coll128 WITH L2BINGE@0;
coll128 WITH L3BINGE@0;

coll130 WITH IBINGE@0;
coll130 WITH L1BINGE@0;
coll130 WITH L2BINGE@0;
coll130 WITH L3BINGE@0;

pare18 WITH IBINGE@0;
pare18 WITH L1BINGE@0;
pare18 WITH L2BINGE@0;
pare18 WITH L3BINGE@0;

pare20 WITH IBINGE@0;
pare20 WITH L1BINGE@0;
pare20 WITH L2BINGE@0;
pare20 WITH L3BINGE@0;

pare22 WITH IBINGE@0;
pare22 WITH L1BINGE@0;
pare22 WITH L2BINGE@0;
pare22 WITH L3BINGE@0;

pare24 WITH IBINGE@0;
pare24 WITH L1BINGE@0;
pare24 WITH L2BINGE@0;
pare24 WITH L3BINGE@0;

pare26 WITH IBINGE@0;
pare26 WITH L1BINGE@0;
pare26 WITH L2BINGE@0;
pare26 WITH L3BINGE@0;

pare28 WITH IBINGE@0;
pare28 WITH L1BINGE@0;
pare28 WITH L2BINGE@0;
pare28 WITH L3BINGE@0;

pare30 WITH IBINGE@0;
pare30 WITH L1BINGE@0;
pare30 WITH L2BINGE@0;

pare30 WITH L3BINGE@0;

resi18 WITH IBINGE@0;
resi18 WITH L1BINGE@0;
resi18 WITH L2BINGE@0;
resi18 WITH L3BINGE@0;

resi20 WITH IBINGE@0;
resi20 WITH L1BINGE@0;
resi20 WITH L2BINGE@0;
resi20 WITH L3BINGE@0;

resi22 WITH IBINGE@0;
resi22 WITH L1BINGE@0;
resi22 WITH L2BINGE@0;
resi22 WITH L3BINGE@0;

resi24 WITH IBINGE@0;
resi24 WITH L1BINGE@0;
resi24 WITH L2BINGE@0;
resi24 WITH L3BINGE@0;

resi26 WITH IBINGE@0;
resi26 WITH L1BINGE@0;
resi26 WITH L2BINGE@0;
resi26 WITH L3BINGE@0;

resi28 WITH IBINGE@0;
resi28 WITH L1BINGE@0;
resi28 WITH L2BINGE@0;
resi28 WITH L3BINGE@0;

resi30 WITH IBINGE@0;
resi30 WITH L1BINGE@0;
resi30 WITH L2BINGE@0;
resi30 WITH L3BINGE@0;

mla18 WITH IBINGE@0;
mla18 WITH L1BINGE@0;
mla18 WITH L2BINGE@0;
mla18 WITH L3BINGE@0;

mla20 WITH IBINGE@0;
mla20 WITH L1BINGE@0;
mla20 WITH L2BINGE@0;
mla20 WITH L3BINGE@0;

mla22 WITH IBINGE@0;
mla22 WITH L1BINGE@0;
mla22 WITH L2BINGE@0;

mlda22 WITH L3BINGE@0;

mlda24 WITH IBINGE@0;
mlda24 WITH L1BINGE@0;
mlda24 WITH L2BINGE@0;
mlda24 WITH L3BINGE@0;

mlda26 WITH IBINGE@0;
mlda26 WITH L1BINGE@0;
mlda26 WITH L2BINGE@0;
mlda26 WITH L3BINGE@0;

mlda28 WITH IBINGE@0;
mlda28 WITH L1BINGE@0;
mlda28 WITH L2BINGE@0;
mlda28 WITH L3BINGE@0;

!!!!!!!!!!!!!!!!!!!!!!
MODEL MALE:
!!!!!!!!!!!!!!!!!!!!!!

!Specification of growth factors

IBINGE BY Freq18@1 Freq20@1 Freq22@1 Freq24@1
Freq26@1 Freq28@1 Freq30@1;

L1BINGE BY Freq18@0 Freq20@1 Freq22@2 Freq24@2
Freq26@2 Freq28@2 Freq30@2;

L2BINGE BY Freq18@0 Freq20@0 Freq22@0 Freq24@1
Freq26@2 Freq28@2 Freq30@2;

L3BINGE BY Freq18@0 Freq20@0 Freq22@0 Freq24@0
Freq26@0 Freq28@1 Freq30@2;

[IBINGE](m1);
[L1BINGE](m2);
[L2BINGE](m3);
[L3BINGE](m4);

IBINGE;
L1BINGE;
L2BINGE;
L3BINGE;

!Covariances among growth factors

IBINGE with L1BINGE;
IBINGE with L2BINGE;
IBINGE with L3BINGE;

L1BINGE with L2BINGE;
L1BINGE with L3BINGE;

L2BINGE with L3BINGE;

!Specifying cohort as predictor of growth factors
[Lcohort];
Lcohort;

[Qcohort];
Qcohort;

Lcohort with Qcohort;

Freq18 on Lcohort(m5);
Freq20 on Lcohort(m6);
Freq22 on Lcohort(m7);
Freq24 on Lcohort(m8);
Freq26 on Lcohort(m9);
Freq28 on Lcohort(m10);
Freq30 on Lcohort(m11);

Freq18 on Qcohort(m12);
Freq20 on Qcohort(m13);
Freq22 on Qcohort(m14);
Freq24 on Qcohort(m15);
Freq26 on Qcohort(m16);
Freq28 on Qcohort(m17);
Freq30 on Qcohort(m18);

!Specifying roles as time-varying predictors

[marr18]; [marr20]; [marr22]; [marr24];
[marr26]; [marr28]; [marr30];
marr18; marr20; marr22; marr24; marr26; marr28; marr30;

marr18 on Lcohort(ma11L);
marr20 on Lcohort(ma12L);
marr22 on Lcohort(ma13L);
marr24 on Lcohort(ma14L);
marr26 on Lcohort(ma15L);
marr28 on Lcohort(ma16L);
marr30 on Lcohort(ma17L);

marr18 on Qcohort(ma11Q);
marr20 on Qcohort(ma12Q);
marr22 on Qcohort(ma13Q);
marr24 on Qcohort(ma14Q);

marr26 on Qcohort(ma15Q);
marr28 on Qcohort(ma16Q);
marr30 on Qcohort(ma17Q);

Freq18 on marr18(mb11);
Freq20 on marr20(mb12);
Freq22 on marr22(mb13);
Freq24 on marr24(mb14);
Freq26 on marr26(mb15);
Freq28 on marr28(mb16);
Freq30 on marr30(mb17);

marr18 with marr20 marr22 marr24 marr26 marr28 marr30;
marr20 with marr22 marr24 marr26 marr28 marr30;
marr22 with marr24 marr26 marr28 marr30;
marr24 with marr26 marr28 marr30;
marr26 with marr28 marr30;
marr28 with marr30;

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[work26]; [work28]; [work30];
work20; work22; work24; work26; work28; work30;

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work22 on Lcohort(ma23L);
work24 on Lcohort(ma24L);
work26 on Lcohort(ma25L);
work28 on Lcohort(ma26L);
work30 on Lcohort(ma27L);

work20 on Qcohort(ma22Q);
work22 on Qcohort(ma23Q);
work24 on Qcohort(ma24Q);
work26 on Qcohort(ma25Q);
work28 on Qcohort(ma26Q);
work30 on Qcohort(ma27Q);

Freq20 on work20(mb22);
Freq22 on work22(mb23);
Freq24 on work24(mb24);
Freq26 on work26(mb25);
Freq28 on work28(mb26);
Freq30 on work30(mb27);

work20 with work22 work24 work26 work28 work30;
work22 with work24 work26 work28 work30;
work24 with work26 work28 work30;
work26 with work28 work30;
work28 with work30;

work20 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work22 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work24 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work26 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work28 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work30 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

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[coll126]; [coll128]; [coll130];
coll120; coll122; coll124; coll126; coll128; coll130;

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coll122 on Lcohort(ma33L);
coll124 on Lcohort(ma34L);
coll126 on Lcohort(ma35L);
coll128 on Lcohort(ma36L);
coll130 on Lcohort(ma37L);

coll120 on Qcohort(ma32Q);
coll122 on Qcohort(ma33Q);
coll124 on Qcohort(ma34Q);
coll126 on Qcohort(ma35Q);
coll128 on Qcohort(ma36Q);
coll130 on Qcohort(ma37Q);

Freq20 on coll120(mb32);
Freq22 on coll122(mb33);
Freq24 on coll124(mb34);
Freq26 on coll126(mb35);
Freq28 on coll128(mb36);
Freq30 on coll130(mb37);

coll120 with coll122 coll124 coll126 coll128 coll130;
coll122 with coll124 coll126 coll128 coll130;
coll124 with coll126 coll128 coll130;
coll126 with coll128 coll130;
coll128 with coll130;

coll120 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

coll22 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
coll24 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
coll26 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
coll28 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
coll30 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

coll20 with work20 work22 work24 work26 work28 work30;
coll22 with work20 work22 work24 work26 work28 work30;
coll24 with work20 work22 work24 work26 work28 work30;
coll26 with work20 work22 work24 work26 work28 work30;
coll28 with work20 work22 work24 work26 work28 work30;
coll30 with work20 work22 work24 work26 work28 work30;

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[pare26]; [pare28]; [pare30];
pare18; pare20; pare22; pare24; pare26; pare28; pare30;

pare18 on Lcohort(ma41L);
pare20 on Lcohort(ma42L);
pare22 on Lcohort(ma43L);
pare24 on Lcohort(ma44L);
pare26 on Lcohort(ma45L);
pare28 on Lcohort(ma46L);
pare30 on Lcohort(ma47L);

pare18 on Qcohort(ma41Q);
pare20 on Qcohort(ma42Q);
pare22 on Qcohort(ma43Q);
pare24 on Qcohort(ma44Q);
pare26 on Qcohort(ma45Q);
pare28 on Qcohort(ma46Q);
pare30 on Qcohort(ma47Q);

Freq18 on pare18(mb41);
Freq20 on pare20(mb42);
Freq22 on pare22(mb43);
Freq24 on pare24(mb44);
Freq26 on pare26(mb45);
Freq28 on pare28(mb46);
Freq30 on pare30(mb47);

pare18 with pare20 pare22 pare24 pare26 pare28 pare30;
pare20 with pare22 pare24 pare26 pare28 pare30;
pare22 with pare24 pare26 pare28 pare30;
pare24 with pare26 pare28 pare30;
pare26 with pare28 pare30;
pare28 with pare30;

pare18 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare20 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare22 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare24 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare26 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare28 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare30 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

pare18 with work20 work22 work24 work26 work28 work30;
pare20 with work20 work22 work24 work26 work28 work30;
pare22 with work20 work22 work24 work26 work28 work30;
pare24 with work20 work22 work24 work26 work28 work30;
pare26 with work20 work22 work24 work26 work28 work30;
pare28 with work20 work22 work24 work26 work28 work30;
pare30 with work20 work22 work24 work26 work28 work30;

pare18 with coll20 coll22 coll24 coll26 coll28 coll30;
pare20 with coll20 coll22 coll24 coll26 coll28 coll30;
pare22 with coll20 coll22 coll24 coll26 coll28 coll30;
pare24 with coll20 coll22 coll24 coll26 coll28 coll30;
pare26 with coll20 coll22 coll24 coll26 coll28 coll30;
pare28 with coll20 coll22 coll24 coll26 coll28 coll30;
pare30 with coll20 coll22 coll24 coll26 coll28 coll30;

[resi18]; [resi20]; [resi22]; [resi24];
[resi26]; [resi28]; [resi30];
resi18; resi20; resi22; resi24; resi26; resi28; resi30;

resi18 on Lcohort(ma51L);
resi20 on Lcohort(ma52L);
resi22 on Lcohort(ma53L);
resi24 on Lcohort(ma54L);
resi26 on Lcohort(ma55L);
resi28 on Lcohort(ma56L);
resi30 on Lcohort(ma57L);

resi18 on Qcohort(ma51Q);
resi20 on Qcohort(ma52Q);
resi22 on Qcohort(ma53Q);
resi24 on Qcohort(ma54Q);
resi26 on Qcohort(ma55Q);
resi28 on Qcohort(ma56Q);
resi30 on Qcohort(ma57Q);

Freq18 on resi18(mb51);
Freq20 on resi20(mb52);
Freq22 on resi22(mb53);
Freq24 on resi24(mb54);
Freq26 on resi26(mb55);
Freq28 on resi28(mb56);

Freq30 on resi30(mb57);

resi18 with resi20 resi22 resi24 resi26 resi28 resi30;
resi20 with resi22 resi24 resi26 resi28 resi30;
resi22 with resi24 resi26 resi28 resi30;
resi24 with resi26 resi28 resi30;
resi26 with resi28 resi30;
resi28 with resi30;

resi18 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
resi20 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
resi22 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
resi24 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
resi26 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
resi28 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
resi30 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

resi18 with work20 work22 work24 work26 work28 work30;
resi20 with work20 work22 work24 work26 work28 work30;
resi22 with work20 work22 work24 work26 work28 work30;
resi24 with work20 work22 work24 work26 work28 work30;
resi26 with work20 work22 work24 work26 work28 work30;
resi28 with work20 work22 work24 work26 work28 work30;
resi30 with work20 work22 work24 work26 work28 work30;

resi18 with coll20 coll22 coll24 coll26 coll28 coll30;
resi20 with coll20 coll22 coll24 coll26 coll28 coll30;
resi22 with coll20 coll22 coll24 coll26 coll28 coll30;
resi24 with coll20 coll22 coll24 coll26 coll28 coll30;
resi26 with coll20 coll22 coll24 coll26 coll28 coll30;
resi28 with coll20 coll22 coll24 coll26 coll28 coll30;
resi30 with coll20 coll22 coll24 coll26 coll28 coll30;

resi18 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
resi20 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
resi22 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
resi24 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
resi26 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
resi28 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
resi30 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;

[mlda18]; [mlda20]; [mlda22]; [mlda24];
[mlda26]; [mlda28];
mlda18; mlda20; mlda22; mlda24; mlda26; mlda28;

mlda18 on Lcohort(ma61L);
mlda20 on Lcohort(ma62L);
mlda22 on Lcohort(ma63L);

mlda24 on Lcohort(ma64L);
mlda26 on Lcohort(ma65L);
mlda28 on Lcohort(ma66L);

mlda18 on Qcohort(ma61Q);
mlda20 on Qcohort(ma62Q);
mlda22 on Qcohort(ma63Q);
mlda24 on Qcohort(ma64Q);
mlda26 on Qcohort(ma65Q);
mlda28 on Qcohort(ma66Q);

Freq18 on mlda18(mb61);
Freq20 on mlda20(mb62);
Freq22 on mlda22(mb63);
Freq24 on mlda24(mb64);
Freq26 on mlda26(mb65);
Freq28 on mlda28(mb66);

mlda18 with mlda20 mlda22 mlda24 mlda26 mlda28;
mlda20 with mlda22 mlda24 mlda26 mlda28;
mlda22 with mlda24 mlda26 mlda28;
mlda24 with mlda26 mlda28;
mlda26 with mlda28;

mlda18 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
mlda20 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
mlda22 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
mlda24 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
mlda26 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
mlda28 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

mlda18 with work20 work22 work24 work26 work28 work30;
mlda20 with work20 work22 work24 work26 work28 work30;
mlda22 with work20 work22 work24 work26 work28 work30;
mlda24 with work20 work22 work24 work26 work28 work30;
mlda26 with work20 work22 work24 work26 work28 work30;
mlda28 with work20 work22 work24 work26 work28 work30;

mlda18 with coll20 coll22 coll24 coll26 coll28 coll30;
mlda20 with coll20 coll22 coll24 coll26 coll28 coll30;
mlda22 with coll20 coll22 coll24 coll26 coll28 coll30;
mlda24 with coll20 coll22 coll24 coll26 coll28 coll30;
mlda26 with coll20 coll22 coll24 coll26 coll28 coll30;
mlda28 with coll20 coll22 coll24 coll26 coll28 coll30;

mlda18 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;

mlda20 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
mlda22 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
mlda24 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
mlda26 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
mlda28 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;

mlda18 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;
mlda20 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;
mlda22 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;
mlda24 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;
mlda26 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;
mlda28 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;

!Specifying variances and means of growth factor indicators

Freq18;
Freq20;
Freq22;
Freq24;
Freq26;
Freq28;
Freq30;

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[Freq20@0];
[Freq22@0];
[Freq24@0];
[Freq26@0];
[Freq28@0];
[Freq30@0];

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Lcohort WITH L1BINGE@0;
Lcohort WITH L2BINGE@0;
Lcohort WITH L3BINGE@0;

rQCOHORT WITH IBINGE@0;
rQCOHORT WITH L1BINGE@0;
rQCOHORT WITH L2BINGE@0;
rQCOHORT WITH L3BINGE@0;

!!!!!!!!!!!!!!!!!!!!!!
MODEL FEMALE:
!!!!!!!!!!!!!!!!!!!!!!

!Specification of growth factors

IBINGE BY Freq18@1 Freq20@1 Freq22@1 Freq24@1
Freq26@1 Freq28@1 Freq30@1;

L1BINGE BY Freq18@0 Freq20@1 Freq22@2 Freq24@2
Freq26@2 Freq28@2 Freq30@2;

L2BINGE BY Freq18@0 Freq20@0 Freq22@0 Freq24@1
Freq26@2 Freq28@2 Freq30@2;

L3BINGE BY Freq18@0 Freq20@0 Freq22@0 Freq24@0
Freq26@0 Freq28@1 Freq30@2;

[IBINGE](f1);
[L1BINGE](f2);
[L2BINGE](f3);
[L3BINGE](f4);

IBINGE;
L1BINGE;
L2BINGE;
L3BINGE;

!Covariances among growth factors

IBINGE with L1BINGE;
IBINGE with L2BINGE;
IBINGE with L3BINGE;

L1BINGE with L2BINGE;
L1BINGE with L3BINGE;

L2BINGE with L3BINGE;

!Specifying cohort as predictor of growth factors

[Lcohort];
Lcohort;

[Qcohort];
Qcohort;

Lcohort with Qcohort;

Freq18 on Lcohort(f5);
Freq20 on Lcohort(f6);
Freq22 on Lcohort(f7);
Freq24 on Lcohort(f8);
Freq26 on Lcohort(f9);
Freq28 on Lcohort(f10);
Freq30 on Lcohort(f11);

Freq18 on Qcohort(f12);
Freq20 on Qcohort(f13);
Freq22 on Qcohort(f14);

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Freq24 on Qcohort(f15);
Freq26 on Qcohort(f16);
Freq28 on Qcohort(f17);
Freq30 on Qcohort(f18);
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!Specifying roles as time-varying predictors

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[marr18]; [marr20]; [marr22]; [marr24];
[marr26]; [marr28]; [marr30];
marr18; marr20; marr22; marr24; marr26; marr28; marr30;
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marr18 on Lcohort(fa11L);
marr20 on Lcohort(fa12L);
marr22 on Lcohort(fa13L);
marr24 on Lcohort(fa14L);
marr26 on Lcohort(fa15L);
marr28 on Lcohort(fa16L);
marr30 on Lcohort(fa17L);
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marr18 on Qcohort(fa11Q);
marr20 on Qcohort(fa12Q);
marr22 on Qcohort(fa13Q);
marr24 on Qcohort(fa14Q);
marr26 on Qcohort(fa15Q);
marr28 on Qcohort(fa16Q);
marr30 on Qcohort(fa17Q);
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Freq18 on marr18(fb11);
Freq20 on marr20(fb12);
Freq22 on marr22(fb13);
Freq24 on marr24(fb14);
Freq26 on marr26(fb15);
Freq28 on marr28(fb16);
Freq30 on marr30(fb17);
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marr18 with marr20 marr22 marr24 marr26 marr28 marr30;
marr20 with marr22 marr24 marr26 marr28 marr30;
marr22 with marr24 marr26 marr28 marr30;
marr24 with marr26 marr28 marr30;
marr26 with marr28 marr30;
marr28 with marr30;
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[work20]; [work22]; [work24];
[work26]; [work28]; [work30];
work20; work22; work24; work26; work28; work30;
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work22 on Lcohort(fa23L);
work24 on Lcohort(fa24L);
work26 on Lcohort(fa25L);
work28 on Lcohort(fa26L);
work30 on Lcohort(fa27L);

work20 on Qcohort(fa22Q);
work22 on Qcohort(fa23Q);
work24 on Qcohort(fa24Q);
work26 on Qcohort(fa25Q);
work28 on Qcohort(fa26Q);
work30 on Qcohort(fa27Q);

Freq20 on work20(fb22);
Freq22 on work22(fb23);
Freq24 on work24(fb24);
Freq26 on work26(fb25);
Freq28 on work28(fb26);
Freq30 on work30(fb27);

work20 with work22 work24 work26 work28 work30;
work22 with work24 work26 work28 work30;
work24 with work26 work28 work30;
work26 with work28 work30;
work28 with work30;

work20 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work22 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work24 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work26 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work28 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
work30 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

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[coll126]; [coll128]; [coll130];
coll120; coll122; coll124; coll126; coll128; coll130;

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coll122 on Lcohort(fa33L);
coll124 on Lcohort(fa34L);
coll126 on Lcohort(fa35L);
coll128 on Lcohort(fa36L);
coll130 on Lcohort(fa37L);

coll120 on Qcohort(fa32Q);
coll122 on Qcohort(fa33Q);

coll24 on Qcohort(fa34Q);
coll26 on Qcohort(fa35Q);
coll28 on Qcohort(fa36Q);
coll30 on Qcohort(fa37Q);

Freq20 on coll20(fb32);
Freq22 on coll22(fb33);
Freq24 on coll24(fb34);
Freq26 on coll26(fb35);
Freq28 on coll28(fb36);
Freq30 on coll30(fb37);

coll20 with coll22 coll24 coll26 coll28 coll30;
coll22 with coll24 coll26 coll28 coll30;
coll24 with coll26 coll28 coll30;
coll26 with coll28 coll30;
coll28 with coll30;

coll20 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
coll22 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
coll24 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
coll26 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
coll28 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
coll30 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

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coll22 with work20 work22 work24 work26 work28 work30;
coll24 with work20 work22 work24 work26 work28 work30;
coll26 with work20 work22 work24 work26 work28 work30;
coll28 with work20 work22 work24 work26 work28 work30;
coll30 with work20 work22 work24 work26 work28 work30;

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[pare26]; [pare28]; [pare30];
pare18; pare20; pare22; pare24; pare26; pare28; pare30;

pare18 on Lcohort(fa41L);
pare20 on Lcohort(fa42L);
pare22 on Lcohort(fa43L);
pare24 on Lcohort(fa44L);
pare26 on Lcohort(fa45L);
pare28 on Lcohort(fa46L);
pare30 on Lcohort(fa47L);

pare18 on Qcohort(fa41Q);
pare20 on Qcohort(fa42Q);
pare22 on Qcohort(fa43Q);
pare24 on Qcohort(fa44Q);
pare26 on Qcohort(fa45Q);

pare28 on Qcohort(fa46Q);
pare30 on Qcohort(fa47Q);

Freq18 on pare18(fb41);
Freq20 on pare20(fb42);
Freq22 on pare22(fb43);
Freq24 on pare24(fb44);
Freq26 on pare26(fb45);
Freq28 on pare28(fb46);
Freq30 on pare30(fb47);

pare18 with pare20 pare22 pare24 pare26 pare28 pare30;
pare20 with pare22 pare24 pare26 pare28 pare30;
pare22 with pare24 pare26 pare28 pare30;
pare24 with pare26 pare28 pare30;
pare26 with pare28 pare30;
pare28 with pare30;

pare18 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare20 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare22 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare24 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare26 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare28 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
pare30 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

pare18 with work20 work22 work24 work26 work28 work30;
pare20 with work20 work22 work24 work26 work28 work30;
pare22 with work20 work22 work24 work26 work28 work30;
pare24 with work20 work22 work24 work26 work28 work30;
pare26 with work20 work22 work24 work26 work28 work30;
pare28 with work20 work22 work24 work26 work28 work30;
pare30 with work20 work22 work24 work26 work28 work30;

pare18 with coll20 coll22 coll24 coll26 coll28 coll30;
pare20 with coll20 coll22 coll24 coll26 coll28 coll30;
pare22 with coll20 coll22 coll24 coll26 coll28 coll30;
pare24 with coll20 coll22 coll24 coll26 coll28 coll30;
pare26 with coll20 coll22 coll24 coll26 coll28 coll30;
pare28 with coll20 coll22 coll24 coll26 coll28 coll30;
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resi30 on Lcohort(fa57L);

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Freq28 on resi28(fb56);
Freq30 on resi30(fb57);

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resi28 with work20 work22 work24 work26 work28 work30;
resi30 with work20 work22 work24 work26 work28 work30;

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resi28 with coll20 coll22 coll24 coll26 coll28 coll30;
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mlda20 on Qcohort(fa52Q);
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mlda24 on Qcohort(fa54Q);
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Freq24 on mlda24(fb54);
Freq26 on mlda26(fb55);
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mlda24 with mlda26 mlda28;
mlda26 with mlda28;

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mlda20 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
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mlda24 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
mlda26 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;
mlda28 with marr18 marr20 marr22 marr24 marr26 marr28 marr30;

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mla20 with work20 work22 work24 work26 work28 work30;
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mla26 with work20 work22 work24 work26 work28 work30;
mla28 with work20 work22 work24 work26 work28 work30;

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mla20 with coll20 coll22 coll24 coll26 coll28 coll30;
mla22 with coll20 coll22 coll24 coll26 coll28 coll30;
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mla26 with coll20 coll22 coll24 coll26 coll28 coll30;
mla28 with coll20 coll22 coll24 coll26 coll28 coll30;

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mla22 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
mla24 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
mla26 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;
mla28 with pare18 pare20 pare22 pare24 pare26 pare28 pare30;

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mla20 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;
mla22 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;
mla24 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;
mla26 with resi18 resi20 resi22 resi24 resi26 resi28 resi30;
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!Specifying variances and means of growth factor indicators

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Freq20;
Freq22;
Freq24;
Freq26;
Freq28;
Freq30;

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Lcohort WITH L1BINGE@0;
Lcohort WITH L2BINGE@0;

Lcohort WITH L3BINGE@0;

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rQCOHORT WITH L1BINGE@0;

rQCOHORT WITH L2BINGE@0;

rQCOHORT WITH L3BINGE@0;

MODEL CONSTRAINT:

!Creating new parameters that capture:

! 1) gender differences (i.e., female estimates are subtracted from corresponding male estimates) in growth factors and direct effects of cohort;

! 2) Male-specific indirect effects of cohort (through social roles and mlda);

! 3) Female-specific indirect effects of cohort (through social roles and mlda); and

! 4) Gender differences in indirect effects of cohort.

NEW (

!Names of effects for Gender differences in growth factors - see below for specifications

D_I

D_L1

D_L2

D_L3

!Names of effects for Gender differences in direct linear effects of cohort - see below for specifications

D_LB18

D_LB20

D_LB22

D_LB24

D_LB26

D_LB28

D_LB30

!Names of effects for Gender differences in direct quadratic effects of cohort - see below for specifications

D_QB18

D_QB20

D_QB22

D_QB24

D_QB26

D_QB28

D_QB30

!Names of Male indirect effects - see below for specifications

M_I11L

M_I12L

M_I13L

M_I14L

M_I15L

M_I16L

M_I17L

M_I11Q

M_I12Q
M_I13Q
M_I14Q
M_I15Q
M_I16Q
M_I17Q
M_I22L
M_I23L
M_I24L
M_I25L
M_I26L
M_I27L
M_I22Q
M_I23Q
M_I24Q
M_I25Q
M_I26Q
M_I27Q
M_I32L
M_I33L
M_I34L
M_I35L
M_I36L
M_I37L
M_I32Q
M_I33Q
M_I34Q
M_I35Q
M_I36Q
M_I37Q
M_I41L
M_I42L
M_I43L
M_I44L
M_I45L
M_I46L
M_I47L
M_I41Q
M_I42Q
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M_I64L
M_I65L
M_I66L
M_I67L
M_I61Q
M_I62Q
M_I63Q
M_I64Q
M_I65Q
M_I66Q
M_I67Q
M_IT1L
M_IT2L
M_IT3L
M_IT4L
M_IT5L
M_IT6L
M_IT7L
M_IT1Q
M_IT2Q
M_IT3Q
M_IT4Q
M_IT5Q
M_IT6Q
M_IT7Q

!Names of Female indirect effects - see below for specifications

F_I11L
F_I12L
F_I13L
F_I14L
F_I15L
F_I16L
F_I17L
F_I11Q
F_I12Q
F_I13Q
F_I14Q
F_I15Q
F_I16Q
F_I17Q

F_I22L
F_I23L
F_I24L
F_I25L
F_I26L
F_I27L
F_I22Q
F_I23Q
F_I24Q
F_I25Q
F_I26Q
F_I27Q
F_I32L
F_I33L
F_I34L
F_I35L
F_I36L
F_I37L
F_I32Q
F_I33Q
F_I34Q
F_I35Q
F_I36Q
F_I37Q
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F_I42L
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F_I44L
F_I45L
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F_I42Q
F_I43Q
F_I44Q
F_I45Q
F_I46Q
F_I47Q
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F_I55L
F_I56L
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F_I52Q
F_I53Q
F_I54Q
F_I55Q
F_I56Q

F_I61L
F_I62L
F_I63L
F_I64L
F_I65L
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F_I67L
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F_I63Q
F_I64Q
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F_I67Q
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F_IT2L
F_IT3L
F_IT4L
F_IT5L
F_IT6L
F_IT7L
F_IT1Q
F_IT2Q
F_IT3Q
F_IT4Q
F_IT5Q
F_IT6Q
F_IT7Q

!Names of gender differences in indirect effects - see below for specifications

D_I11L
D_I12L
D_I13L
D_I14L
D_I15L
D_I16L
D_I17L
D_I11Q
D_I12Q
D_I13Q
D_I14Q
D_I15Q
D_I16Q
D_I17Q
D_I22L
D_I23L
D_I24L
D_I25L
D_I26L
D_I27L

D_I22Q
D_I23Q
D_I24Q
D_I25Q
D_I26Q
D_I27Q
D_I32L
D_I33L
D_I34L
D_I35L
D_I36L
D_I37L
D_I32Q
D_I33Q
D_I34Q
D_I35Q
D_I36Q
D_I37Q
D_I41L
D_I42L
D_I43L
D_I44L
D_I45L
D_I46L
D_I47L
D_I41Q
D_I42Q
D_I43Q
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D_I67L
D_I61Q
D_I62Q
D_I63Q
D_I64Q
D_I65Q
D_I66Q
D_I67Q
D_IT1L
D_IT2L
D_IT3L
D_IT4L
D_IT5L
D_IT6L
D_IT7L
D_IT1Q
D_IT2Q
D_IT3Q
D_IT4Q
D_IT5Q
D_IT6Q
D_IT7Q
);

!!!! Gender differences in growth factors

D_I = m1-f1; !Intercept
D_L1 = m2-f2; !Age 18-22 growth
D_L2 = m3-f3; !Age 22-26 growth
D_L3 = m4-f4; !Age 26-30 growth

!!!! Gender differences in linear direct effects of cohort

D_B18 = m5-f5; !
D_LB20 = m6-f6;
D_LB22 = m7-f7;
D_LB24 = m8-f8;
D_LB26 = m9-f9;
D_LB28 = m10-f10;
D_LB30 = m11-f11;

!!!! Gender differences in quadratic direct effects of cohort

D_QB18 = m12-f12;
D_QB20 = m13-f13;
D_QB22 = m14-f14;
D_QB24 = m15-f15;
D_QB26 = m16-f16;
D_QB28 = m17-f17;
D_QB30 = m18-f18;

!!!!!!!!!!!!!!!!!!!! INDIRECT EFFECTS !!!!!!!!!!!!!!!!!!!!!!!!!!!!!

!! Male Specific !!

!!!! Males: linear indirect effects of marriage

M_I11L = (ma11L*mb11); !Age 18
M_I12L = (ma12L*mb12); !Age 20
M_I13L = (ma13L*mb13); !Age 22
M_I14L = (ma14L*mb14); !Age 24
M_I15L = (ma15L*mb15); !Age 26
M_I16L = (ma16L*mb16); !Age 28
M_I17L = (ma17L*mb17); !Age 30

!!!! Males: quadratic indirect effects of marriage

M_I11Q = (ma11Q*mb11); !Age 18
M_I12Q = (ma12Q*mb12); !Age 20
M_I13Q = (ma13Q*mb13); !Age 22
M_I14Q = (ma14Q*mb14); !Age 24
M_I15Q = (ma15Q*mb15); !Age 26
M_I16Q = (ma16Q*mb16); !Age 28
M_I17Q = (ma17Q*mb17); !Age 30

!!!! Males: linear indirect effects of full-time work

M_I22L = (ma22L*mb22); !Age 20
M_I23L = (ma23L*mb23); !Age 22
M_I24L = (ma24L*mb24); !Age 24
M_I25L = (ma25L*mb25); !Age 26
M_I26L = (ma26L*mb26); !Age 28
M_I27L = (ma27L*mb27); !Age 30

!!!! Males: quadratic indirect effects of full-time work

M_I22Q = (ma22Q*mb22); !Age 20
M_I23Q = (ma23Q*mb23); !Age 22
M_I24Q = (ma24Q*mb24); !Age 24
M_I25Q = (ma25Q*mb25); !Age 26
M_I26Q = (ma26Q*mb26); !Age 28
M_I27Q = (ma27Q*mb27); !Age 30

!!!! Males: linear indirect effects of full-time college

M_I32L = (ma32L*mb32); !Age 20
M_I33L = (ma33L*mb33); !Age 22
M_I34L = (ma34L*mb34); !Age 24
M_I35L = (ma35L*mb35); !Age 26
M_I36L = (ma36L*mb36); !Age 28
M_I37L = (ma37L*mb37); !Age 30

!!!! Males: quadratic indirect effects of full-time college

M_I32Q = (ma32Q*mb32); !Age 20
M_I33Q = (ma33Q*mb33); !Age 22
M_I34Q = (ma34Q*mb34); !Age 24

M_I35Q = (ma35Q*mb35); !Age 26
M_I36Q = (ma36Q*mb36); !Age 28
M_I37Q = (ma37Q*mb37); !Age 30

!!!! Males: linear indirect effects of parental status

M_I41L = (ma41L*mb41); !Age 18
M_I42L = (ma42L*mb42); !Age 20
M_I43L = (ma43L*mb43); !Age 22
M_I44L = (ma44L*mb44); !Age 24
M_I45L = (ma45L*mb45); !Age 26
M_I46L = (ma46L*mb46); !Age 28
M_I47L = (ma47L*mb47); !Age 30

!!!! Males: quadratic indirect effects of parental status

M_I41Q = (ma41Q*mb41); !Age 18
M_I42Q = (ma42Q*mb42); !Age 20
M_I43Q = (ma43Q*mb43); !Age 22
M_I44Q = (ma44Q*mb44); !Age 24
M_I45Q = (ma45Q*mb45); !Age 26
M_I46Q = (ma46Q*mb46); !Age 28
M_I47Q = (ma47Q*mb47); !Age 30

!!!! Males: linear indirect effects of residential independence

M_I51L = (ma51L*mb51); !Age 18
M_I52L = (ma52L*mb52); !Age 20
M_I53L = (ma53L*mb53); !Age 22
M_I54L = (ma54L*mb54); !Age 24
M_I55L = (ma55L*mb55); !Age 26
M_I56L = (ma56L*mb56); !Age 28
M_I57L = (ma57L*mb57); !Age 30

!!!! Males: quadratic indirect effects of residential independence

M_I51Q = (ma51Q*mb51); !Age 18
M_I52Q = (ma52Q*mb52); !Age 20
M_I53Q = (ma53Q*mb53); !Age 22
M_I54Q = (ma54Q*mb54); !Age 24
M_I55Q = (ma55Q*mb55); !Age 26
M_I56Q = (ma56Q*mb56); !Age 28
M_I57Q = (ma57Q*mb57); !Age 30

!!!! Males: linear indirect effects of mllda

M_I61L = (ma61L*mb61); !Age 18
M_I62L = (ma62L*mb62); !Age 20
M_I63L = (ma63L*mb63); !Age 22
M_I64L = (ma64L*mb64); !Age 24
M_I65L = (ma65L*mb65); !Age 26
M_I66L = (ma66L*mb66); !Age 28

!!!! Males: quadratic indirect effects of mllda

M_I61Q = (ma61Q*mb61); !Age 18

$M_I62Q = (ma62Q * mb62); !Age\ 20$
 $M_I63Q = (ma63Q * mb63); !Age\ 22$
 $M_I64Q = (ma64Q * mb64); !Age\ 24$
 $M_I65Q = (ma65Q * mb65); !Age\ 26$
 $M_I66Q = (ma66Q * mb66); !Age\ 28$

!!!! Males: combined linear indirect effects

$M_IT1L = M_I11L + M_I41L + M_I51L + M_I61L; !Age\ 18$
 $M_IT2L = M_I12L + M_I22L + M_I32L + M_I42L + M_I52L + M_I62L; !Age\ 20$
 $M_IT3L = M_I13L + M_I23L + M_I33L + M_I43L + M_I53L + M_I63L; !Age\ 22$
 $M_IT4L = M_I14L + M_I24L + M_I34L + M_I44L + M_I54L + M_I64L; !Age\ 24$
 $M_IT5L = M_I15L + M_I25L + M_I35L + M_I45L + M_I55L + M_I65L; !Age\ 26$
 $M_IT6L = M_I16L + M_I26L + M_I36L + M_I46L + M_I56L + M_I66L; !Age\ 28$
 $M_IT7L = M_I17L + M_I27L + M_I37L + M_I47L + M_I57L; !Age\ 30$

!!!! Males: combined quadratic indirect effects

$M_IT1Q = M_I11Q + M_I41Q + M_I51Q + M_I61Q; !Age\ 18$
 $M_IT2Q = M_I12Q + M_I22Q + M_I32Q + M_I42Q + M_I52Q + M_I62Q;; !Age\ 20$
 $M_IT3Q = M_I13Q + M_I23Q + M_I33Q + M_I43Q + M_I53Q + M_I63Q;; !Age\ 22$
 $M_IT4Q = M_I14Q + M_I24Q + M_I34Q + M_I44Q + M_I54Q + M_I64Q;; !Age\ 24$
 $M_IT5Q = M_I15Q + M_I25Q + M_I35Q + M_I45Q + M_I55Q + M_I65Q;; !Age\ 26$
 $M_IT6Q = M_I16Q + M_I26Q + M_I36Q + M_I46Q + M_I56Q + M_I66Q;; !Age\ 28$
 $M_IT7Q = M_I17Q + M_I27Q + M_I37Q + M_I47Q + M_I57Q;; !Age\ 30$

!! Female Specific !!

!!!! Females: linear indirect effects of marriage

$F_I11L = (fa11L * fb11); !Age\ 18$
 $F_I12L = (fa12L * fb12); !Age\ 20$
 $F_I13L = (fa13L * fb13); !Age\ 22$
 $F_I14L = (fa14L * fb14); !Age\ 24$
 $F_I15L = (fa15L * fb15); !Age\ 26$
 $F_I16L = (fa16L * fb16); !Age\ 28$
 $F_I17L = (fa17L * fb17); !Age\ 30$

!!!! Females: quadratic indirect effects of marriage

$F_I11Q = (fa11Q * fb11); !Age\ 18$
 $F_I12Q = (fa12Q * fb12); !Age\ 20$
 $F_I13Q = (fa13Q * fb13); !Age\ 22$
 $F_I14Q = (fa14Q * fb14); !Age\ 24$
 $F_I15Q = (fa15Q * fb15); !Age\ 26$
 $F_I16Q = (fa16Q * fb16); !Age\ 28$
 $F_I17Q = (fa17Q * fb17); !Age\ 30$

!!!! Females: linear indirect effects of full-time work

$F_I22L = (fa22L * fb22); !Age\ 20$
 $F_I23L = (fa23L * fb23); !Age\ 22$
 $F_I24L = (fa24L * fb24); !Age\ 24$
 $F_I25L = (fa25L * fb25); !Age\ 26$

F_I26L = (fa26L*fb26); !Age 28
F_I27L = (fa27L*fb27); !Age 30

!!!! Females: quadratic indirect effects of full-time work

F_I22Q = (fa22Q*fb22); !Age 20
F_I23Q = (fa23Q*fb23); !Age 22
F_I24Q = (fa24Q*fb24); !Age 24
F_I25Q = (fa25Q*fb25); !Age 26
F_I26Q = (fa26Q*fb26); !Age 28
F_I27Q = (fa27Q*fb27); !Age 30

!!!! Females: linear indirect effects of full-time college

F_I32L = (fa32L*fb32); !Age 20
F_I33L = (fa33L*fb33); !Age 22
F_I34L = (fa34L*fb34); !Age 24
F_I35L = (fa35L*fb35); !Age 26
F_I36L = (fa36L*fb36); !Age 28
F_I37L = (fa37L*fb37); !Age 30

!!!! Females: quadratic indirect effects of full-time college

F_I32Q = (fa32Q*fb32); !Age 20
F_I33Q = (fa33Q*fb33); !Age 22
F_I34Q = (fa34Q*fb34); !Age 24
F_I35Q = (fa35Q*fb35); !Age 26
F_I36Q = (fa36Q*fb36); !Age 28
F_I37Q = (fa37Q*fb37); !Age 30

!!!! Females: linear indirect effects of parental status

F_I41L = (fa41L*fb41); !Age 18
F_I42L = (fa42L*fb42); !Age 20
F_I43L = (fa43L*fb43); !Age 22
F_I44L = (fa44L*fb44); !Age 24
F_I45L = (fa45L*fb45); !Age 26
F_I46L = (fa46L*fb46); !Age 28
F_I47L = (fa47L*fb47); !Age 30

!!!! Females: quadratic indirect effects of parental status

F_I41Q = (fa41Q*fb41); !Age 18
F_I42Q = (fa42Q*fb42); !Age 20
F_I43Q = (fa43Q*fb43); !Age 22
F_I44Q = (fa44Q*fb44); !Age 24
F_I45Q = (fa45Q*fb45); !Age 26
F_I46Q = (fa46Q*fb46); !Age 28
F_I47Q = (fa47Q*fb47); !Age 30

!!!! Females: linear indirect effects of residential independence

F_I51L = (fa51L*fb51); !Age 18
F_I52L = (fa52L*fb52); !Age 20
F_I53L = (fa53L*fb53); !Age 22
F_I54L = (fa54L*fb54); !Age 24

F_I55L = (fa55L*fb55); !Age 26
 F_I56L = (fa56L*fb56); !Age 28
 F_I57L = (fa57L*fb57); !Age 30

!!!! Females: quadratic indirect effects of residential independence

F_I51Q = (fa51Q*fb51); !Age 18
 F_I52Q = (fa52Q*fb52); !Age 20
 F_I53Q = (fa53Q*fb53); !Age 22
 F_I54Q = (fa54Q*fb54); !Age 24
 F_I55Q = (fa55Q*fb55); !Age 26
 F_I56Q = (fa56Q*fb56); !Age 28
 F_I57Q = (fa57Q*fb57); !Age 30

!!!! Females: linear indirect effects of mlda

F_I61L = (fa61L*fb61); !Age 18
 F_I62L = (fa62L*fb62); !Age 20
 F_I63L = (fa63L*fb63); !Age 22
 F_I64L = (fa64L*fb64); !Age 24
 F_I65L = (fa65L*fb65); !Age 26
 F_I66L = (fa66L*fb66); !Age 28

!!!! Females: quadratic indirect effects of mlda

F_I61Q = (fa61Q*fb61); !Age 18
 F_I62Q = (fa62Q*fb62); !Age 20
 F_I63Q = (fa63Q*fb63); !Age 22
 F_I64Q = (fa64Q*fb64); !Age 24
 F_I65Q = (fa65Q*fb65); !Age 26
 F_I66Q = (fa66Q*fb66); !Age 28

!!!! Females: combined linear indirect effects

F_IT1L = F_I11L+F_I41L+F_I51L+F_I61L; !Age 18
 F_IT2L = F_I12L+F_I22L+F_I32L+F_I42L+F_I52L+F_I62L; !Age 20
 F_IT3L = F_I13L+F_I23L+F_I33L+F_I43L+F_I53L+F_I63L; !Age 22
 F_IT4L = F_I14L+F_I24L+F_I34L+F_I44L+F_I54L+F_I64L; !Age 24
 F_IT5L = F_I15L+F_I25L+F_I35L+F_I45L+F_I55L+F_I65L; !Age 26
 F_IT6L = F_I16L+F_I26L+F_I36L+F_I46L+F_I56L+F_I66L; !Age 28
 F_IT7L = F_I17L+F_I27L+F_I37L+F_I47L+F_I57L; !Age 30

!!!! Females: combined quadratic indirect effects

F_IT1Q = F_I11Q+F_I41Q+F_I51Q+F_I61Q; !Age 18
 F_IT2Q = F_I12Q+F_I22Q+F_I32Q+F_I42Q+F_I52Q+F_I62Q; !Age 20
 F_IT3Q = F_I13Q+F_I23Q+F_I33Q+F_I43Q+F_I53Q+F_I63Q; !Age 22
 F_IT4Q = F_I14Q+F_I24Q+F_I34Q+F_I44Q+F_I54Q+F_I64Q; !Age 24
 F_IT5Q = F_I15Q+F_I25Q+F_I35Q+F_I45Q+F_I55Q+F_I65Q; !Age 26
 F_IT6Q = F_I16Q+F_I26Q+F_I36Q+F_I46Q+F_I56Q+F_I66Q; !Age 28
 F_IT7Q = F_I17Q+F_I27Q+F_I37Q+F_I47Q+F_I57Q; !Age 30

!! Gender differences !!

!!!! Gender differences in linear indirect effects of marriage

D_I11L = (ma11L*mb11)-(fa11L*fb11); !Age 18
D_I12L = (ma12L*mb12)-(fa12L*fb12); !Age 20
D_I13L = (ma13L*mb13)-(fa13L*fb13); !Age 22
D_I14L = (ma14L*mb14)-(fa14L*fb14); !Age 24
D_I15L = (ma15L*mb15)-(fa15L*fb15); !Age 26
D_I16L = (ma16L*mb16)-(fa16L*fb16); !Age 28
D_I17L = (ma17L*mb17)-(fa17L*fb17); !Age 30

!!!! Gender differences in quadratic indirect effects of marriage

D_I11Q = (ma11Q*mb11)-(fa11Q*fb11); !Age 18
D_I12Q = (ma12Q*mb12)-(fa12Q*fb12); !Age 20
D_I13Q = (ma13Q*mb13)-(fa13Q*fb13); !Age 22
D_I14Q = (ma14Q*mb14)-(fa14Q*fb14); !Age 24
D_I15Q = (ma15Q*mb15)-(fa15Q*fb15); !Age 26
D_I16Q = (ma16Q*mb16)-(fa16Q*fb16); !Age 28
D_I17Q = (ma17Q*mb17)-(fa17Q*fb17); !Age 30

!!!! Gender differences in linear indirect effects of full-time work

D_I22L = (ma22L*mb22)-(fa22L*fb22); !Age 20
D_I23L = (ma23L*mb23)-(fa23L*fb23); !Age 22
D_I24L = (ma24L*mb24)-(fa24L*fb24); !Age 24
D_I25L = (ma25L*mb25)-(fa25L*fb25); !Age 26
D_I26L = (ma26L*mb26)-(fa26L*fb26); !Age 28
D_I27L = (ma27L*mb27)-(fa27L*fb27); !Age 30

!!!! Gender differences in quadratic indirect effects of full-time work

D_I22Q = (ma22Q*mb22)-(fa22Q*fb22); !Age 20
D_I23Q = (ma23Q*mb23)-(fa23Q*fb23); !Age 22
D_I24Q = (ma24Q*mb24)-(fa24Q*fb24); !Age 24
D_I25Q = (ma25Q*mb25)-(fa25Q*fb25); !Age 26
D_I26Q = (ma26Q*mb26)-(fa26Q*fb26); !Age 28
D_I27Q = (ma27Q*mb27)-(fa27Q*fb27); !Age 30

!!!! Gender differences in linear indirect effects of full-time college

D_I32L = (ma32L*mb32)-(fa32L*fb32); !Age 20
D_I33L = (ma33L*mb33)-(fa33L*fb33); !Age 22
D_I34L = (ma34L*mb34)-(fa34L*fb34); !Age 24
D_I35L = (ma35L*mb35)-(fa35L*fb35); !Age 26
D_I36L = (ma36L*mb36)-(fa36L*fb36); !Age 28
D_I37L = (ma37L*mb37)-(fa37L*fb37); !Age 30

!!!! Gender differences in quadratic indirect effects of full-time college

D_I32Q = (ma32Q*mb32)-(fa32Q*fb32); !Age 20
D_I33Q = (ma33Q*mb33)-(fa33Q*fb33); !Age 22
D_I34Q = (ma34Q*mb34)-(fa34Q*fb34); !Age 24
D_I35Q = (ma35Q*mb35)-(fa35Q*fb35); !Age 26
D_I36Q = (ma36Q*mb36)-(fa36Q*fb36); !Age 28
D_I37Q = (ma37Q*mb37)-(fa37Q*fb37); !Age 30

!!!! Gender differences in linear indirect effects of parental status

D_I41L = (ma41L*mb41)-(fa41L*fb41); !Age 18
D_I42L = (ma42L*mb42)-(fa42L*fb42); !Age 20
D_I43L = (ma43L*mb43)-(fa43L*fb43); !Age 22
D_I44L = (ma44L*mb44)-(fa44L*fb44); !Age 24
D_I45L = (ma45L*mb45)-(fa45L*fb45); !Age 26
D_I46L = (ma46L*mb46)-(fa46L*fb46); !Age 28
D_I47L = (ma47L*mb47)-(fa47L*fb47); !Age 30

!!!! Gender differences in quadratic indirect effects of parental status

D_I41Q = (ma41Q*mb41)-(fa41Q*fb41); !Age 18
D_I42Q = (ma42Q*mb42)-(fa42Q*fb42); !Age 20
D_I43Q = (ma43Q*mb43)-(fa43Q*fb43); !Age 22
D_I44Q = (ma44Q*mb44)-(fa44Q*fb44); !Age 24
D_I45Q = (ma45Q*mb45)-(fa45Q*fb45); !Age 26
D_I46Q = (ma46Q*mb46)-(fa46Q*fb46); !Age 28
D_I47Q = (ma47Q*mb47)-(fa47Q*fb47); !Age 30

!!!! Gender differences in linear indirect effects of residential independence

D_I51L = (ma51L*mb51)-(fa51L*fb51); !Age 18
D_I52L = (ma52L*mb52)-(fa52L*fb52); !Age 20
D_I53L = (ma53L*mb53)-(fa53L*fb53); !Age 22
D_I54L = (ma54L*mb54)-(fa54L*fb54); !Age 24
D_I55L = (ma55L*mb55)-(fa55L*fb55); !Age 26
D_I56L = (ma56L*mb56)-(fa56L*fb56); !Age 28
D_I57L = (ma57L*mb57)-(fa57L*fb57); !Age 30

!!!! Gender differences in quadratic indirect effects of residential independence

D_I51Q = (ma51Q*mb51)-(fa51Q*fb51); !Age 18
D_I52Q = (ma52Q*mb52)-(fa52Q*fb52); !Age 20
D_I53Q = (ma53Q*mb53)-(fa53Q*fb53); !Age 22
D_I54Q = (ma54Q*mb54)-(fa54Q*fb54); !Age 24
D_I55Q = (ma55Q*mb55)-(fa55Q*fb55); !Age 26
D_I56Q = (ma56Q*mb56)-(fa56Q*fb56); !Age 28
D_I57Q = (ma57Q*mb57)-(fa57Q*fb57); !Age 30

!!!! Gender differences in linear indirect effects of mlda

D_I61L = (ma61L*mb61)-(fa61L*fb61); !Age 18
D_I62L = (ma62L*mb62)-(fa62L*fb62); !Age 20
D_I63L = (ma63L*mb63)-(fa63L*fb63); !Age 22
D_I64L = (ma64L*mb64)-(fa64L*fb64); !Age 24
D_I65L = (ma65L*mb65)-(fa65L*fb65); !Age 26
D_I66L = (ma66L*mb66)-(fa66L*fb66); !Age 28

!!!! Gender differences in quadratic indirect effects of mlda

D_I61Q = (ma61Q*mb61)-(fa61Q*fb61); !Age 18
D_I62Q = (ma62Q*mb62)-(fa62Q*fb62); !Age 20
D_I63Q = (ma63Q*mb63)-(fa63Q*fb63); !Age 22
D_I64Q = (ma64Q*mb64)-(fa64Q*fb64); !Age 24

D_I65Q = (ma65Q*mb65)-(fa65Q*fb65); !Age 26
D_I66Q = (ma66Q*mb66)-(fa66Q*fb66); !Age 28

!!!! Gender differences in combined linear indirect effects
D_IT1L = D_I11L+D_I41L+D_I51L+D_I61L; !Age 18
D_IT2L = D_I12L+D_I22L+D_I32L+D_I42L+D_I52L+D_I62L; !Age 20
D_IT3L = D_I13L+D_I23L+D_I33L+D_I43L+D_I53L+D_I63L; !Age 22
D_IT4L = D_I14L+D_I24L+D_I34L+D_I44L+D_I54L+D_I64L; !Age 24
D_IT5L = D_I15L+D_I25L+D_I35L+D_I45L+D_I55L+D_I65L; !Age 26
D_IT6L = D_I16L+D_I26L+D_I36L+D_I46L+D_I56L+D_I66L; !Age 28
D_IT7L = D_I17L+D_I27L+D_I37L+D_I47L+D_I57L; !Age 30

!!!! Gender differences in combined quadratic indirect effects
D_IT1Q = D_I11Q+D_I41Q+D_I51Q+D_I61Q; !Age 18
D_IT2Q = D_I12Q+D_I22Q+D_I32Q+D_I42Q+D_I52Q+D_I62Q; !Age 20
D_IT3Q = D_I13Q+D_I23Q+D_I33Q+D_I43Q+D_I53Q+D_I63Q; !Age 22
D_IT4Q = D_I14Q+D_I24Q+D_I34Q+D_I44Q+D_I54Q+D_I64Q; !Age 24
D_IT5Q = D_I15Q+D_I25Q+D_I35Q+D_I45Q+D_I55Q+D_I65Q; !Age 26
D_IT6Q = D_I16Q+D_I26Q+D_I36Q+D_I46Q+D_I56Q+D_I66Q; !Age 18
D_IT7Q = D_I17Q+D_I27Q+D_I37Q+D_I47Q+D_I57Q; !Age 30

OUTPUT:Standardized sampstat;