

Title:

Substance use cohort group latent growth model-Constrained

DATA:

FILE IS C9-12-15 W1-3 SUB Condensed File n=2336.dat;

!Tells program which data file to use in running this program

VARIABLE:

MISSING ARE ALL (-999); !Sets the global missing value for data set

NAMES ARE subid basisid wave cohort source subufile suburaid

month day year hrssubus minsubus hrssubue minsubue evalcw1

lyalcw1 evpotw1 lypotw1 evcocw1 lycocw1 evcrkw1 lycrkwl

evgluw1 lygluw1 evodrw1 lyodrw1 evalcw2 lyalcw2 evpotw2

lypotw2 evcocw2 lycocw2 evcrkw2 lycrkwl evgluw2 lygluw2

evpsyw2 lyherw2 evbarw2 lybarw2 evtraw2

lytraw2 evampw2 lyampw2 evalcw3 lyalcw3 evpotw3 lypotw3

evcocw3 lycocw3 evcrkw3 lycrkwl evgluw3 lygluw3 evpsyw3

lypsyw3 evherw3 lyherw3 evbarw3 lybarw3 evtraw3 lytraw3

evampw3 lyampw3 subuclnd evpsyw1 lypsyw1 evherw1 lyherw1

evbarw1 lybarw1 evtraw1 lytraw1 evampw1 lyampw1 evalcw1b

lyalcw1b evpotw1b lypotw1b evcocw1b lycocw1b evcrkw1b

lycrkw1b evgluw1b lygluw1b evodrw1b lyodrw1b evalcw2b

lyalcw2b evpotw2b lypotw2b evcocw2b lycocw2b evcrkw2b lycrkwl2b

evgluw2b lygluw2b evpsyw2b lypsyw2b evherw2b lyherw2b

evbarw2b lybarw2b evtraw2b lytraw2b evampw2b lyampw2b

evalcw3b lyalcw3b evpotw3b lypotw3b evcocw3b lycocw3b

evcrkw3b lycrkwl3b evgluw3b lygluw3b evpsyw3b lypsyw3b

evherw3b lyherw3b evbarw3b lybarw3b evtraw3b lytraw3b evampw3b

lyampw3b evpsyw1b lypsyw1b evherw1b lyherw1b evbarw1b

lybarw1b evtraw1b lytraw1b evampw1b lyampw1b lyodrw2b

lyodrw3b lyadw1b lyadw2b lyadw3b lyad4w1b lyad4w2b

lyad4w3b lydrgrw1b lydrgrw2b lydrgrw3b lyad3w1b lyad3w2b lyad3w3b;

usevariables are lyadw1b lyadw2b lyadw3b; !Defines the Wave 1-3

!Substance Use measures to be used in the growth models

count= lyadw1b (i) lyadw2b (i) lyadw3b (i); !designates variables

!as count distributed with zero inflation "(i)";

classes= ccoh (3); !Creates a "class" variable with three categories

knownclass= ccoh (cohort=9 cohort=12 cohort=15); !defines categories

!based on the "cohort" variable, this creates the groups for the analysis

ANALYSIS: type=mixture; !overall command for class-based analysis

algorithm=integration; !Necessary setting for Count model

MODEL:

%Overall%!Defines the overall model for the analysis

i s |lyadw1b@0 lyadw2b@2 lyadw3b@4; !syntax for growth model in MPlus

[i] (1); [s] (2); !Next three lines offer constraints around the various

i (3); s (4); !estimates in a latent growth model (Means, variance, covariance

i WITH s (5); !of latent growth estimates-Intercept, Slope)

%ccoh#2%!sets equality constraints so that all cohorts have the same growth parameters

i s |lyadw1b@0 lyadw2b@2 lyadw3b@4;

%ccoh#3%!sets equality constraints for this cohort as well

i s |lyadw1b@0 lyadw2b@2 lyadw3b@4;

OUTPUT: TECH1; !Provides summary of estimated parameters

Plot: type is Plot1 Plot2 Plot3;

series = lyadw1b-lyadw3b (*); !provides line plots for growth trends, estimated

! and actual