Mplus Syntax for Final Latent Change Score Models

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MODEL:
 !!CRP
 !truescores
x1 by CRPlog1@1;
 x2 by CRPlog2@1;
 x3 by CRPlog3@1;
 [x1*]; x1;
 [x2-x3@0];
 x2-x3@0;
 [CRPlog1-CRPlog3@0];
 CRPlog1-CRPlog3 (s1);
 !autoregressions
 x2 \text{ on } x1@1;
 x3 \text{ on } x2@1;
 !change scores
 xd2 by x2@1;
 xd3 by x3@1;
 [xd2-xd3@0];
 xd2-xd3@0;
 xd2 WITH xd3@0; !change scores not allowed to covary to prevent convergence issues
 !proportional change
 xd2 on x1;! (b);
 xd3 on x2;! (b);
 !! regressions
 !lifetime discrimination predicting baseline CRP
 x1 ON EODSITBASE
   AGE DIAGYRS RELATE
   EDU LEV INCPOV AVG INSURE WORKSTAT
   BMI STEROID HYDROXY IMMUNO SMOKE CURRENT
   SLAQ BILD;
 ! Y1 discrimination predicting CRP change scores from Baseline to Y1
 xd2 on Y1EODSIT (a) !constrain estimates across Y1 and Y2
   EODSITBASE
   AGE DIAGYRS RELATE
   EDU LEV INCPOV AVG INSURE WORKSTAT
```

BMI STEROID HYDROXY IMMUNO SMOKE_CURRENT SLAQ BILD;

! Y2 discrimination predicting CRP change scores from Y1 to Y2 xd3 on Y2EODSIT (a) !constrain estimates across Y1 and Y2

Y1EODSIT

EODSITBASE

AGE DIAGYRS RELATE

EDU LEV INCPOV AVG INSURE WORKSTAT

BMI STEROID HYDROXY IMMUNO SMOKE_CURRENT SLAQ BILD;

!discrimination autoregressions

Y1EODSIT on EODSITBASE

AGE DIAGYRS RELATE

EDU LEV INCPOV AVG INSURE WORKSTAT

BMI STEROID HYDROXY IMMUNO SMOKE_CURRENT SLAQ BILD;

Y2EODSIT on Y1EODSIT

AGE DIAGYRS RELATE

EDU LEV INCPOV AVG INSURE WORKSTAT

BMI STEROID HYDROXY IMMUNO SMOKE_CURRENT SLAQ BILD;

!make covariates endogenous for FIML

EODSITBASE Y1EODSIT Y2SIT

AGE DIAGYRS RELATE

EDU LEV INCPOV AVG INSURE WORKSTAT

BMI STEROID HYDROXY IMMUNO SMOKE_CURRENT SLAQ BILD;