

Question:

I'm doing a LTA with 5 continuous indicators, two timepoints and the same 3 latent classes at each timepoint. The three latent classes are ordinal, so the first class has the lowest values on all indicators and the last class has the highest values on all indicators.

I want to look for significant differences between the following "groups" with continuous variables (predictors): all individuals who are transitioning to a lower class (decrease), 3->1 or 2, 2->1; all individuals who remain in a class (maintenance); and all individuals who transition into a higher class (increase), 1 -> 2 or 3, 2 -> 3.

Which possibilities does Mplus provide for that in the context of LTA and are there guidelines for that? I would be interested in e.g. a mean for the predictors for these transition groups and odds ratios or whatever there is.

Answer:

Here are some options:

1. Use the output option Tech7.
2. Use the manual BCH approach. Save the bchweights from the LTA model, then analyze the variable and constrain the means to be the same across the three groups: "up" "down" "steady". See Section 3 <https://www.statmodel.com/examples/webnotes/webnote21.pdf>
3. Similarly 3-step manual estimation. See Section 3 in <http://statmodel.com/download/webnotes/webnote15.pdf>
4. Just add the new variable (or a duplicate) to the LTA model and the mean constraints across classes (1-step approach)