



Advanced longitudinal modeling in Mplus (S23)

10-14 July 2023

Course Director: Dr. Rebecca Kuiper

E-mail: ms.summerschool@uu.nl

Day	Time	Type	Description	Location
Monday	09:00 -12:15	Lecture Dr. Beth Grandfield	On the formulas behind SEM; calculating the number of parameters and degrees of freedom by hand; how to interpret the TECH1 output; when to worry about the default settings in.	Ruppert building, room 116
	12:15 -13.15	Lunch	In Educatorium	
	13:15 -16:30	Computer lab*		
Tuesday	09:00 -12:15	Lecture Dr. Beth Grandfield & Computer lab*	A journey through the world of latent growth models: Mplus specification, model fit, interpretation of LGM parameters, the metric of time, LGM variations, and more.	
	12:15 -13.15	Lunch	In Educatorium	
	13:15 -16:30	Lecture Dr. Beth Grandfield & Computer lab*		
Wednesday	09:00 -12:15	Lecture Jeroen Mulder & Computer lab*	Longitudinal models with (latent) categorical variables, including latent class growth analysis, growth mixture modeling, and latent transition analysis.	
	12:15 -13.15	Lunch	In Educatorium	
	13:15 -16:30	Lecture Jeroen Mulder & Computer lab*		
Thursday	09:00 -12:15	Lecture Jeroen Mulder & Computer lab*	Introduction to a selection of popular longitudinal SEM models for investigating cross-lagged effects, including the random-intercept cross-lagged panel model (RI-CLPM), autoregressive latent trajectory (ALT) model, dynamic panel model (DPM), and latent curve model with structured residuals (LCM-SR). We critically reflect on the assumptions that are required for a causal interpretation of the estimated cross-lagged effects. We discuss some techniques that show potential for strengthening our causal conclusions using these models.	
	12:15 -13.15	Lunch	In Educatorium	
	13:15 -16:30	Lecture Jeroen Mulder & Computer lab*		
Friday	09:00 -12:15	Lecture Prof. dr. Ellen Hamaker	Dynamic structural equation modeling (DSEM) to model intensive longitudinal data (e.g., experience sampling or daily diary data); single level models (for N=1) and multilevel extensions (N>1).	
	12:15 -13.15	Lunch	In Educatorium	
	13:15 -16:30	Computer lab*		



* Remarks Computer lab

During the computer lab meetings, we will make use of software including Mplus 8.8. In case you do not have Mplus (8.8) on your own laptop, it will be available via SolisWorkspace (SWS). You can access this via your SolisID (for more information regarding the SolisID, see the pre-departure e-mail).

Manuals for using SWS are available via the following links.

General (brief): <https://students.uu.nl/en/myworkplace>

Windows (more details): <https://manuals.uu.nl/en/handleiding/myworkplace-windows-10/>

MacOS (more details): <https://manuals.uu.nl/en/handleiding/myworkplace-macos/>

Please check before the start of the course whether you can access Mplus in this way.

Breaks:

The breaks will be in the restaurant 'Educatorium' (www.uu.nl/en/educatorium). On Monday morning, there will be signage directing you to the Educatorium. A part of the restaurant will be reserved for us.

- ✓ 8.30am coffee & tea
- ✓ 10.30am coffee & tea
- ✓ 12.15-13.15 (or an hour around 12.45 – 1.15pm) lunch

Note: Know that the computer room is available from 13.15 on.

On Monday take a break from 12.15-13.15, because ICT people will be available at 13.15!

- ✓ 2.30pm soda drinks (Dutch: fris) and fruit

Questions

- If you have any course-related questions, please let us know (MS.SummerSchool@uu.nl).
- In case of other questions (e.g., related to housing), contact **Utrecht Summer School Organization** (info@utrechtsummerschool.nl or +31 (0) 30 253 4400).