Random-Intercept Cross-lagged Panel Models.

A preconference workshop by Loes Keijsers, Tilburg University

Unraveling developmental processes is analytically challenging and requires an analytical strategy that is carefully matched with the substantive question of interest. In recent years, a discussion has been instigated regarding the use of cross-lagged panel model for understanding adolescent development (e.g., Hamaker et al, 2015; Keijsers, 2016; Berry et al, 2017). The key-question in this vivid discussion is the question to which extent the analytical technique is able to identify processes at the individual person level.

The purpose of this workshop is twofold.

Objective 1. The workshop will help researchers understand the conceptual aspects of this ongoing debate regarding ecological fallacies, in which both the pros and cons of different alternative analytical methods are being discussed (including Random-Intercept Cross-Lagged Panel Models and Multilevel Models). By reflecting on their own research question, conducting small experiments, and engaging in discussion, participants will obtain an integrative framework of the analytical possibilities and learn about the unique weaknesses and strengths. This is intended to support researchers in make well-informed choices regarding their analytical strategy in the future.

Objective 2. Moreover, in the afternoon, we will practice with Random-Intercept Cross-Lagged Panel Models in Mplus or R (depending on the participants' personal interests), which is one of the recent extensions of a traditional cross-lagged panel model. For this second part, participants are expected to have basic knowledge of Structural Equation Modeling, as well as some knowledge of how to specify a SEM in either Mplus or R. If longitudinal data are available, participants are encouraged to bring their own data, and practice on their own dataset (for RICLPM, three or more waves of data are needed).