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Mixture Three-Step Latent Vector Autoregression to Find Individuals With Similar Dynamic Processes

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Researchers often use vector autoregressive models to study dynamic processes of latent variables in daily life, such as the extent to which positive and negative affect carry over and interact with each other from one moment to the next. Mixture modeling allows finding clusters of individuals that are similar to each other in their dynamic processes. However, applying MMG-SEM to vector autoregressive models is not straightforward. For example, not only metric, but also (partial) scalar invariance has to hold. To validly cluster individuals based on their dynamic processes while accounting for partial measurement non-invariance, we present an extension of the recently proposed Three-Step Latent Vector Autoregression (3S-LVAR). We discuss challenges that arise when applying the idea of MMG-SEM to intensive longitudinal data and how to tackle them.

Primary authors: VERMUNT, Jeroen (Tilburg University); DE ROOVER, Kim (KU Leuven); VOGELSMEIER, Leonie V.D.E.; REIN, Manuel Tobias (Tilburg University)

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