universität wien

Fakultät für Psychologie

Einladung zum Gastvortrag aus der Vortragsreihe: „Arbeits-, Organisations- und Wirtschaftspsychologie"

von

Prof. Dr. Christian Dormann

Universität Mainz

„Continous Time Modeling"

How much time does it take for a cause (e.g., time pressure) to display an effect (e.g., exhaustion)? How much time should be planned for the interval in psychological research (e.g., experiments, longitudinal studies) between a cause and an effect? Interestingly, these two questions can have very different answers because time "passes" differently in individuals vs. samples.

The **guest lecture** (starting at 9:30 a.m., Hörsaal C, NIG 6. Stock) gives an introduction on continuous time analyses as well as its implications for (field-)experiments and longitudinal studies. Based on traditional (discrete time) 2-wave longitudinal studies, it will first be discussed how effects unfold over time and how optimal time lags can be calculated. Next, the mathematical foundation of continuous time models will be explained and it will be shown how data from two or more measurement occasions can be analyzed with continuous time structural equation models. A main advantage of continuous time models (compared to discrete time models) is that they allow for varying time intervals not only inter- but also intra-individually. Thus, continuous time models can also be used to analyze data from diary studies. Moreover, the consideration of different time intervals enables the integration of results from studies with different time intervals in continuous time meta-analyses. To illustrate continuous time methods, it will be shown how they can be used to analyze effects of job satisfaction on job performance in diary studies as well as meta-analyses.

The **workshop** (from 11:00 a.m. to 1:00 p.m., PC-Hörsaal, NIG 6. Stock) builds upon the guest lecture. A short recap on continuous time methods and an overview of the open source statistics software R, Rstudio, and the ctsem-package will be given. Participants will learn how datasets are prepared for analyses and how models are tested in ctsem. Further, it will be shown how the obtained results can be plotted in R and how the results can be converted to discrete time effects for interpretation. Please send requests for participation in the workshop to: roman.prem@univie.ac.at

Dienstag, 23.01.2018; 9:30
Hörsaal C, NIG 6. Stock
Universitätsstraße 7, 1010 Wien

Mag. Dr. Roman Prem & Univ.-Prof. Dr. Christian Korunka