

Research Seminar Series 2017/18 Hierarchical / Multilevel Models

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CIP-Raum, Humboldtallee 32

Statistical software developments at the Centre for Multilevel Modelling

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Abstract:

Stat-JR is a statistical software package recently developed by the multilevel modelling centre in Bristol in collaboration with colleagues in computer science in Southampton. In this talk, we begin by putting the development of Stat-JR in context by describing some of the history of software development at the centre including the MLwiN package and the MLPowSim package for sample size calculations. We then describe how Stat-JR works before demonstrating its use in software comparison via its interoperability functionality. We next describe the eBook interface to Stat-JR which combines statistical analysis with textual information in the form of a dynamic electronic book and has the potential to revolutionise the teaching and application of quantitative methods in the social sciences and beyond. We finish by showing how, firstly this has led to the development of a workflow interface that can be used to create statistical analysis assistants - software tools to guide researchers through the whole analysis process, and secondly how the interoperability functionality has led to the development of a system that constructs application-specific introductory statistics training materials in the SPSS package.

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