

Editorial

VII European Congress of Methodology

Albert Sesé

Department of Psychology, Balearic Islands University, Palma de Mallorca, Spain

The VII European Congress of Methodology (<http://www.eam2016.org>) was held in Palma de Mallorca, Balearic Islands (Spain), from July 27 to 29, 2016. The European Congress of Methodology is organized biennially under the supervision of the European Association of Methodology (EAM; <http://www.eam-online.org/>), a society established in 2004, which brings together a large number of researchers from all over the world. The Congress provides a forum for specialists in scientific research methodology from all over Europe and beyond to meet and discuss the latest advances in the field of scientific methodology. The 2016 conference was organized by the Department of Psychology at Balearic Islands University and was sponsored by Hogrefe Publishing, the Balearic Association for the promotion of Clinical and Health Psychology, the Faculty of Psychology, and the Research Vice-rector of the Balearic Islands University.

This edition welcomed 170 participants from 25 countries belonging to four continents. The scientific program of the Congress included 30 organized sessions and 120 oral communications, with 12 symposia and 18 free sessions, which were chaired by distinguished experts in the respective field. The main topics comprised many areas of Methodology as Psychometrics, data analysis, observational, survey, experimental and quasi-experimental designs, structural equation modeling, meta-analysis, interdisciplinary research, simulation techniques, methodological developments and applications, and software demonstrations, among others. Moreover, three poster sessions were also scheduled. The timing of the program was designed for promoting informal scientific exchanges. In order to encourage social relationships free buffet lunches were also served for all participants in the Congress Venue, a luxurious hotel located just in front of the city bay. The social program included a welcome reception by the Deputy Major in the Casal Solleiric, a Palace of the Mallorcan nobility built in the mid-18th century and located at the downtown. The gala dinner took place in the Restaurant Bahia Mediterraneo with a beautiful panorama over the town Bay.

Three invited presentations contributed to enhance the scientific program of the Congress: Dr. Joop Hox (Utrecht

University, The Netherlands), Dr. Jeroen Vermunt (Tilburg University, The Netherlands), and Dr. Alberto Maydeu-Olivares (University of South Carolina, USA). This special issue of *Methodology* contains contributions from the invited speakers that are based on their presentations. The contribution of Joop Hox (2017) reviews computational social science methods and their relation to conventional methodology and statistics. Big data analysis techniques and the quality of this kind of data are interestingly discussed. Jeroen Vermunt deals with Latent Class (LC) analysis and proposes an alternative way for a better interpretation of the latent classes when the number of classes required for obtaining a good fit is large (Van den Bergh, Schmittmann, & Vermunt, 2017). Latent Class Tree (LCT) modeling, that uses a recursive partitioning procedure similar to divisive hierarchical cluster analysis, is proposed. The main advantage of LCT approach is that it gives a clear insight into how the latent classes are formed and how solutions with different numbers of classes relate. Measures to assess the relative importance of the splits are also discussed. Maydeu-Olivares and Shi (2017) presents a paper in the framework of Structural Equation Modeling (SEM), with a simulation study about the effect sizes of model misfit in SEM through standardized residual covariances and residual correlations. Standardized residual covariances and their associated z statistics adjusted for multiple testing, or alternatively, confidence intervals (CIs), provide a multivariate effect size of the misfit of these models. Type I errors and power rates of standardized residual covariances and modification indices are compared in a simulation study.

This special number also includes the best oral communication presented to the “Young Methodologist 2016 EAM Award” from a total number of 11 candidates who had participated in the contest. The Scientific Committee, composed by Julio Sánchez Meca (University of Murcia, Spain), Nekane Balluerka (University of the Basque Country, Spain), Mirjam Moerbeek (Utrecht University, The Netherlands), Johannes Hartig (German Institute for International Educational Research, Germany), and Albert Sesé (Balearic islands University, Spain), decided to

grant two ex-aequo awards. The students, Ines Devlieger (University of Ghent, Belgium) and Miguel Sorrel (Autonomous University of Madrid, Spain), were the recipients of the award. The paper of Devlieger and Rosseel (2017) discusses an extension on the method of Croon (2002), namely Factor Score Path Analysis, that has some advantages over SEM: it requires smaller sample sizes, can handle more complex models and the method is less sensitive to misspecifications, because of its stepwise nature. In the framework of psychometric cognitive models, Sorrel, De la Torre, and Olea (2017) introduces an approximation to the LR test based in a two-step estimation procedure under the generalized deterministic inputs, noisy, “and” gate model framework, the two-step LR test (2LR).

It is also important to point out that the 2016 EAM Congress Poster Award was granted to Gistenlick and Loeys (2016, July) from Ghent University for the work titled “Tests of indistinguishability between roles in small clusters.” The scientific committee valued the quality of the poster format, the contents’ clarity and conciseness, and the scientific quality of the work.

Finally, the General Assembly of EAM, according to its statutes, appreciated all the work, effort, and commitment of Professor Joop Hox, who became EAM Past President, and at the same time the Assembly welcomed the new EAM President, Professor Constantino Arce.

Needless to say that I hope to meet you all during the next EAM conference, which is due to be held July 25–28, 2018, in Germany at the Friedrich Schiller University Jena, and it will be organized by Professor Dr. Rolf Steyer and his team.

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Albert Sesé

Department of Psychology
Balearic Islands University
Guillem Cifre de Colonya Building
Carretera de Valldemossa, km. 7,5
07122 Palma de Mallorca
Spain
albert.sese@uib.es