

Myrsini Katsikatsou

Contact details

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Academic positions

- Forthcoming (1/10/2017) Research Fellow, Department of Statistics, London School of Economics, UK.
Project: "Methods for the analysis of longitudinal dyadic data with an application to intergenerational exchanges of family support".
- 1/10/2014 – 30/09/2017 Research Fellow, Department of Statistics, London School of Economics, UK.
Principal investigator of the project: "Methods of analysis and inference for social survey data within the framework of latent variable modeling and pairwise likelihood". Funded by **ESRC Future Research Leaders Scheme** (ES/L009838/1).
- 1/10/2013 – 30/9/2014 Research Officer, Department of Statistics, London School of Economics, UK.
Project title: "Item non-response and measurement error in cross-national surveys: Methods of data collection and analysis". Principal investigator Dr Jouni Kuha.
- 15/2/2013 – 30/6/2013 Researcher, Department of Statistics, Uppsala University, Sweden.
Duties: 50% research, 35% teaching, and 15% statistical consultancy to researchers of the Faculty of Social Sciences of Uppsala University.

Publications

Published papers in refereed journals

Kuha, J., Butt, S., **Katsikatsou**, M., and Skinner, C. The effect of probing "Don't Know" responses on measurement quality and non-response in surveys. *Journal of American Statistical Association*. In press. <http://dx.doi.org/10.1080/01621459.2017.1323640>

Katsikatsou, M. and Moustaki, I. (2016) Pairwise likelihood ratio tests and model selection criteria for structural equation models with ordinal variables. *Psychometrika*, 81 (4), 1046-1068

Katsikatsou, M., Moustaki, I., Yang-Wallentin, F., and Jöreskog, K. G. (2012) Pairwise likelihood estimation for factor analysis models with ordinal data. *Computational Statistics and Data Analysis*, 56, 4243-4258.

Papers in refereed journals under revision

Kuha, J., **Katsikatsou**, M., and Moustaki, I. Latent variable modelling with non-ignorable item non-response: A general framework and multigroup models for cross-national analysis. *Journal of the Royal Statistical Society- Series A*. Under revision.

To be submitted by end of October 2017

Katsikatsou, M., and Moustaki, I. Pairwise likelihood estimation for confirmatory factor analysis models with ordinal variables and data that are missing at random.

Working Papers

Limited information goodness-of-fit tests for composite likelihood estimation under Simple Random Sampling and complex survey sampling (working title). With Moustaki, I. and Skinner, C.

Other papers and technical reports

Katsikatsou, M. and Kuha, J. (2016) *Latent variable modelling of cross-national survey data*, <http://essedunet.nsd.uib.no/cms/topics/latentvar/>

Katsikatsou, M. (2015) Authored the chapters of Time Series models, Panel Data Analysis, and Logistic Regression for the notes of the course “Research methods for finance” of The Open University, UK.

Statistical Software contributions

Contribution to the R package lavaan providing the code for the pairwise likelihood estimation (PML estimator), fit and test statistics (PLRT), model selection criteria (PL-AIC, PL-BIC), and PML adaptations in the case of missing data (CP-PL, AC-PL, DR-PL). All available in lavaan 0.5-23.1043 and beyond; <http://lavaan.ugent.be/about.html>.

Other Academic Activities

Member of the PhD guidance committee of Ines Devlieger, PhD candidate at the Department of Data Analysis, Ghent University, Belgium.

Reviewer for the journals: Computational Statistics and Data Analysis, Journal of Educational Measurement, Journal of Official Statistics, Psychological Methods, Psychometrika.

LSE citizenship:

2013 – 2014, Member of the Research Committee of Statistics Department.

2016 – 2017, Member of the Athena SWAN self-assessment team of Statistics Department.

2016 – 2017, EDI representative of Statistics Department.

2017 - , Member of LSE Research Staff Committee.

Presentations

At international conferences / workshops

- 7/2017 “The effect of probing "Don't Know" responses on measurement quality and non-response in survey” at the 82nd Annual Meeting of the Psychometric Society, Zurich, Switzerland.
- 7/2016 “Handling item non-response in Structural Equation Modelling with ordinal variables”, at the 81st Annual Meeting of the Psychometric Society, Asheville, North Carolina, USA.
- 6/2016 “Handling item non-response in Structural Equation Modelling with ordinal variables”, (poster) at Modern Modeling Methods conference, Storrs, Connecticut, USA.
- 6/2015 “Analyzing multi-group multivariate data with non-ignorable missingness”, (poster) at 1st MissData Conference, Rennes, France.
- 2/2015 “Applying Pairwise Likelihood within Structural Equation Modeling with Ordinal Variables Using lavaan”, International Workshop on Psychometric Computing, Amsterdam, The Netherlands.
- 7/2014 “Pairwise maximum likelihood for Structural Equation Models: Estimation and Testing”, **invited for a state-of-the-art lecture** at the 79th Annual Meeting of the Psychometric Society, Madison, Wisconsin, USA.
- 8/2012 “Pairwise likelihood estimation for factor analysis models with ordinal data”, at the 77th Annual Meeting of the Psychometric Society, Lincoln, Nebraska, USA.
- 8/2010 “A review of Thurstonian models for ranking data – What can we actually estimate?” at the 75th Annual Meeting of the Psychometric Society, Athens, Georgia, USA.

Invited talks at University Departments

- 5/2017 “Pairwise likelihood estimation for incomplete data for Structural Equation Models with ordinal variables”, at Department of Statistics, Uppsala University, Sweden.

- 10/2016 “Pairwise likelihood estimation for Structural Equation Modelling with ordinal variables and missing values”, at Graduate School of Education, Berkeley, University of California.
- 1/2016 “Pairwise likelihood for Structural Equation Models”, Department of Statistics, University College London.
- 2/2014 “Factor Analysis using R package lavaan”, at the Exeter R Users Group Launch Event, Exeter University, UK.
- 3/2013 “Pairwise Likelihood Estimation for Structural Equation Modelling with Ordinal and Continuous variables” at the Department of Statistics, Stockholm University, Sweden.

Teaching

- 2015 - present LSE Summer course: “Latent Variable Modelling and Structural Equation Modelling for Social Sciences Research”. Class teacher for the computer lab sessions (10 hours).
- 9/2014 Workshop “Latent Trait and Latent Class Analysis for Multiple Groups” at Royal Statistical Society. A part of the lectures and class teacher at the exercise sessions (7 hours).
- 2/2014 – present Class teacher, Department of Statistics & Department of Methodology, London School of Economics, UK.

Courses:

- Multivariate Methods & Multivariate Analysis and Measurement, master level. Computer lab, 16 teaching hours. Spring 2014, 2015, 2016, 2017.
- Sample Surveys & Experiments, undergraduate level. Class teacher, 9 teaching hours, Autumn 2014, 2015.

- 2/2011 – 6/2013 Teaching assistant / lecturer, Department of Statistics, Uppsala University, Sweden.

Courses:

- Probability Theory and Statistical Inference, undergraduate level. Teacher of the exercise sessions, 36 teaching hours, Spring 2011 & Autumn 2013. (Book: Wackerly, Mendenhall, & Scheaffer: *Mathematical Statistics with Applications*)
- Statistical Inference, master level. One of the coordinators of the course, lecturer of half the theory of the course - 12 teaching hours, & teacher of the exercise sessions – 10 teaching hours, Spring 2012. (Book: Casella & Berger: *Statistical Inference*)
- Applied Statistical Methods, undergraduate level. Lecturer, one 3-hour class with topic: Introduction to Factor Analysis, once every semester from Spring 2011 to Spring 2013.
- Structural Equation Modeling, master level. Teacher of the computer exercises, 10 teaching hours, Spring 2013.
- Quantitative Methods II, master course for students of the Faculty of Social Sciences. Lecturer for the part of the course related to Structural Equation Modelling, 12 teaching hours, Spring 2013.

Teaching Training

- 2013 New Graduate Teaching Assistants training, a workshop of 13 hours, organized by the Teaching and Learning Center of London School of Economics.
- 2011 Academic teacher training course, organized by the Division for Development of Teaching and Learning of Uppsala University. The course corresponds to 5-week full time employment training.

Education

- 1/9/2008 – 15/2/2013 PhD in Statistics, Department of Statistics, Uppsala University, Sweden.
Thesis title: Composite Likelihood Estimation for Latent Variable Models with Ordinal and Continuous, or Ranking Variables.
The program required the completion of courses corresponding to 105 ECTS credits (1,5 academic years approximately).
- 1/2011 Licentiate degree, Department of Statistics, Uppsala University, Sweden.
Thesis title: "On the identification of the unrestricted Thurstonian ranking model & Pairwise likelihood estimation for factor analysis models with ordinal data".
- 9/2010 – 1/2011 Visiting research student at London School of Economics, UK.
Supervisor: Dr Irini Moustaki.
- 2005-2007 MSc in Statistics, Department of Statistics, Athens University of Economics and Business, Greece. Grade 9.54 (Grading scale 1 – 10 with 10 the highest grade).
- 2004-2005 Preparatory program for MSc in Statistics at Department of Statistics, Athens University of Economics and Business, Greece. Grade: 10 (Scale 1 - 10).
- 1998-2002 Bachelor in Marketing & Communication (4-year program), Athens University of Economics and Business, Greece. Grade 8.41 (Scale 1 - 10).

Scholarships

Master Level:

- 2005-2007 a) Alexander S. Onassis Public Benefit Foundation, Greece.
b) Department of Statistics, Athens University of Economics and Business, Greece.

Bachelor Level:

- 2000-2001 Greek State Scholarships Foundation.
1998-2002 Nikolaos Papadimitriou Foundation, Greece.

Awards

Best Junior Oral Presentation award at the 77th annual and the 18th International Meeting of the Psychometric Society, Lincoln, Nebraska, USA (July 2012).

Computer Literacy

Programming in R (advanced level), Mplus (advanced level), LISREL (intermediate level), SPSS (advanced level), Stata (intermediate level).

Language skills

English, fluent (speaking, reading, writing).
Greek, native speaker.
Swedish, intermediate (speaking, reading, writing).
French, basic (reading, writing, speaking).

Other working experience

- 9/2015 – present Freelance Statistical consultant, UK. Consultancy on measuring and scoring concepts such as investment risk tolerance and financial literacy to companies providing financial advice to private investors.
- 10/2007-07/2008 Junior Statistician, Agilis Informatics and Statistics, Athens, Greece.
Main client of the company Eurostat.

4/2005-
10/2007 Marketing assistant, Retail Department, Public Power Corporation S.A. of Greece.

9/2003-
8/2004 Export Manager, Union of Agricultural Cooperatives of Lesvos, Greece.