CURRICULUM VITAE

Sophia Rabe-Hesketh

Graduate School of Education 3659 Tolman Hall University of California, Berkeley Berkeley, California 94720-1670

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Citizenship: German (U.S. permanent resident)

ACADEMIC APPOINTMENTS

Current positions:

2004-present: Professor, Graduate Group in Biostatistics, University of California, Berkeley

2003-present: Professor, Graduate School of Education (Quantitative Methods and Evaluation), University of California, Berkeley

Previous positions:

- 2006-2012: Professor of Social Statistics, Department of Quantitative Social Science, Institute of Education, University of London (part-time position)
- 1994-2003: Lecturer to Reader in Statistics, Department of Biostatistics and Computing, Institute of Psychiatry, King's College, University of London

2003-2003: Reader in Statistics

1999-2003: Senior Lecturer in Statistics

1994-1999: Lecturer in Statistics

1992-1994: Postdoctoral Research Fellow (SERC Fellowship), Department of Statistics, University of Leeds

DEGREES

Ph.D., King's College, University of London, 1992, Theoretical Physics (Statistical image analysis)B.Sc. (Honors), King's College, University of London, 1988, Physics

Research interests

Multilevel, longitudinal, item response, structural equation and latent class models and their applications in educational, social, and medical research. Developing the GLLAMM (Generalized Linear Latent And Mixed Models) framework that unifies these models and allows specification of novel multilevel latent variable models for many types of responses including continuous, ordinal and nominal responses, rankings, counts and durations. Estimation methods for complex random effects and latent variable models and non-ignorable missing data problems. Collaborative research in education, psychiatry, psychology, and neuroscience.

STATISTICAL SOFTWARE DEVELOPMENT

Developing the free software gllamm within the general-purpose statistics package Stata for estimating the entire class of GLLAMM models by maximum likelihood using adaptive quadrature. Additional programs provide empirical Bayes predictions, diagnostics and simulations. The programs and further information are available from http://www.gllamm.org.

The software has been used in over 1000 peer-reviewed papers in over 700 different journals in a wide range of areas including education, psychology, social science, medicine, and statistics (see http://www.gllamm.org/pub.html). Short-courses on gllamm have been held in the UK, Germany, Sweden, Italy, Canada, Mexico, Norway, Ireland, Switzerland, and the U.S. The manual has been downloaded over 40,000 times.

Major honors and awards

Elected to National Academy of Education, 2015
President of the Psychometric Society, 2015
Fellow of the American Statistical Association, 2014
UC Berkeley Faculty Award for Outstanding Mentorship of Graduate Student Instructors, 2012
Elected to the International Statistical Institute, 2008
Advisee Dissertation Awards:
Michelle LaMar: 2015 Psychometric Society Dissertation Prize
Ronli Diakow: 2015 Brenda Loyd Dissertation Award,

National Council on Measurement in Education

Minjeong Jeon: 2014 Brenda Loyd Dissertation Award, National Council on Measurement in Education

EDITORIAL SERVICE

Co-Editor, Statistical Methods in Medical Research, 2006-2011

Book series editor for the Chapman & Hall/CRC series Statistics in the Social and Behavioral Sciences, 2006-2012

Associate editor, Psychometrika, 2005-2014

Associate editor, Statistical Modelling, 2005-2011

Associate editor, The Stata Journal, 2001-present

Book review editor, Statistical Methods in Medical Research, 2000-2003

Section editor for Longitudinal and Multilevel Modelling in *Encyclopaedia of Statistics in Behavioral Science*. Wiley, 2005

Member of editorial board, Journal of Educational and Behavioral Statistics, 2011-present

Member of editorial board, Structural Equation Modeling, 2006-present

Member of editorial board, Psychological Methods, 2007-present

OTHER PROFESSIONAL SERVICE

Member of the Executive Committee of the *Psychometric Society* (as president-elect, president, past president), 2013-2015

Elected member of the Board of Trustees of the Psychometric Society, 2012-2013

- Elected member of the Board of Trustees of the Psychometric Society, 2007-2010
- Member of the Technical Advisory Group for the OECD Program of International Student Assessment (PISA), 2007-present
- Member of the Design and Analysis Committee for the U.S. National Assessment of Educational Progress (NAEP), 2006-present
- Expert reviewer for "New Psychometric Models and Statistics" (conference proposals), Annual Meeting of the National Council on Measurement in Education, 2014
- Principal member of the Statistics and Modeling Panel (grant proposals), *Institute of Education Sciences*, U.S. Department of Education, 2009-2012

Scientific program committees for conferences

- International Meeting of the Psychometric Society (Chair), Beijing, China, 2015
- International Meeting of the Psychometric Society, Madison, WI, USA, 2014
- 32nd Annual Conference of the International Society for Clinical Biostatistics, Bergen, Norway, 2012
- 31st Annual Conference of the International Society for Clinical Biostatistics, Montpellier, France, 2010
- Fall North American Stata Users Group Meeting (co-chair), San Francisco, CA, USA, 2008
- West Coast Stata Users Group Meeting (co-chair), Marina del Rey, CA, USA, 2007
- International Workshop on Statistical Latent Variable Models in the Health Sciences, Perugia, Italy, 2006
- 9th UK Stata Users Group Meeting (co-chair), London, UK, 2003

Keynote lectures

- "Consistent estimation of mixed models by ignoring non-ignorable missingness", 29th International Workshop on Statistical Modelling, Göttingen, Germany, 2014.
- "Simple methods for handling non-randomly missing data", Modern Modeling Methods Conference, University of Connecticut, Storrs, CO, USA, 2014.
- "Avoiding omitted-variable bias in multilevel models", Advances in Multilevel Modeling for Educational Research, University of Maryland, MD, USA, 2014.
- "Generalized linear latent and mixed models", 21st Australian Statistical Conference, Adelaide, SA, Australia, 2012.
- "Understanding variability in multilevel models for categorical responses", American Educational Research Association 2012 Annual Meeting, Hierarchical Linear Modeling SIG, Vancouver, BC, Canada, 2012.
- "Generalized linear latent and mixed models", 12th Annual Symposium on Statistics in Psychiatry, Yale University, New Haven, CT, USA, 2010.
- "Multilevel latent variable modeling", *Statistical Modelling and Inference Conference to celebrate Murray Aitkin's 70th birthday.* Queensland University of Technology, Brisbane, QLD, Australia, 2010.
- "Biometrical modeling of twin and family data in Stata", 8th German Stata Users Group Meeting, Humboldt University, Berlin, Germany, 2010.
- "Multilevel modeling of ordinal responses". Mexican Stata Users Group Meeting. Universidad Iberoamericana, Mexico City, Mexico, 2009.

- "Comparison of methods for handling endogenous covariates in longitudinal data". 73rd Annual Meeting of the Psychometric Society, Durham, NH, USA, 2008.
- "Generalized multilevel structural equation modeling". Winemiller Conference on Methodological Developments of Statistics in the Social Sciences. University of Missouri, Columbia, MO, USA, 2006.
- "New developments in latent variable modeling". Biennial Conference of the Fachgruppe Methoden und Evaluation of the German Psychological Society. University of Münster, Germany, 2005.
- "Diagnostics for multilevel models with categorical and discrete responses". Fourth International Amsterdam Conference on Multilevel Analysis, Amsterdam, the Netherlands, 2003.
- "Multilevel selection modeling using gllamm". Dutch and German Stata Users' Group Meeting, Maastricht, the Netherlands, 2002.
- "Generalizing the generalized linear mixed model". Third International Amsterdam Conference on Multilevel Analysis, Amsterdam, the Netherlands, 2001.

PUBLICATION AND CITATION OVERVIEW

- 111 peer-reviewed articles in over 60 different journals, 6 co-authored books, 14 book chapters
- Over 6,300 citations of my articles in the ISI Web of Science with an h-index of 38 (56 in Google Scholar), meaning that my 38 most-cited papers have each been cited at least 38 times (see http://www.researcherid.com/rid/B-1643-2008 for details)
- Rabe-Hesketh, Skrondal and Pickles (2004) is the second most cited paper published in *Psychometrika* since 2004 (ISI Web of Science, April, 2015: 183 citations)
- Rabe-Hesketh and Skrondal (2006) was the most downloaded paper in *Journal of the Royal Statistical Society, Series A* in 2006, 2007, 2008, and 2009; it is the 4th most cited paper published in the journal since 2006 (ISI Web of Science, April, 2015: 103 citations)
- Rabe-Hesketh, Skrondal and Pickles (2005) is the 6th most cited paper published in *Journal of Econometrics* since 2005 (ISI Web of Science, April, 2015: 184 citations)
- Three recent co-authored books have sold over 30,000 copies combined

Authored books (6)

frequently cited (ISI): *: ≥ 20 , **: ≥ 50 , ***: ≥ 100 , ****: ≥ 300 , *****: ≥ 500 , *****: $\geq 1,000$ more than 10,000 copies sold: !

- Rabe-Hesketh, S. and Skrondal, A. (2012). *** (VolumesI&II) Multilevel and Longitudinal Modeling Using Stata (Third Edition). Volume I: Continuous responses. College Station, TX: Stata Press, pp. xxviii + 497.
 - With 341-page solutions manual
- Rabe-Hesketh, S. and Skrondal, A. (2012). Multilevel and Longitudinal Modeling Using Stata (Third Edition). Volume II: Categorical responses, counts, and survival. College Station, TX: Stata Press, pp. xxiii + 474.

– With 243-page solutions manual

- Rabe-Hesketh, S. and Skrondal, A. (2008). Multilevel and Longitudinal Modeling Using Stata (Second Edition). College Station, TX: Stata Press, pp. xxiii + 562. *****! (editions 1&2)
 With 317-page solutions manual
- Rabe-Hesketh, S. and Everitt, B. S. (2006). Handbook of Statistical Analyses Using Stata (Fourth Edition). Boca Raton, FL: Chapman & Hall/CRC, pp. ix + 342. ***! (across editions)
 With 121-page solutions manual

Skrondal, A. and Rabe-Hesketh, S. (2004). Generalized Latent Variable Modeling: Multilevel, Longitudinal and Structural Equation Modeling. Boca Raton, FL: Chapman & Hall/ CRC Press, pp. viii + 508. ****

- With web site http://www.gllamm.org/books/genlat.html]

Translated into Chinese, Chongqing University Press, 2011.

- Everitt, B. S. and Rabe-Hesketh, S. (2001). Analyzing Medical Data using S-PLUS. New York: Springer, pp. vii + 485. *
- Everitt, B. S. and Rabe-Hesketh, S. (1997). The Analysis of Proximity Data. London: Arnold, pp. vii + 192. *

Plus four earlier editions of the books above

Edited books and journal issues (3)

- Skrondal, A. and Rabe-Hesketh, S. (Eds.), *Multilevel Modelling* (Volumes 1-4). Thousand Oaks, CA: Sage, 2010.
 - Vol. I: Linear Multilevel Models: Model Formulation
 - Vol. II: Linear Multilevel Models: Inference, Diagnostics, and Design
 - Vol. III: Multilevel Generalized Linear Models
 - Vol. IV: Complex Models and Issues
- Skrondal, A. and Rabe-Hesketh, S. (Eds.), Special issue on "Latent Variable Modelling". Statistical Methods in Medical Research 17 (1), 2008.
- Rabe-Hesketh, S. (Ed.), Special issue on "Analysis of Medical Images". Statistical Methods in Medical Research 6 (3), 1997.

SUBMITTED JOURNAL ARTICLES (5)

student: s , postdoc: p

- Fuller, B., Bein, E., Bridges, M., Kim, A., Kim, Y. and Rabe-Hesketh, S. Do Academic Preschools Yield Stronger Benefits? How cognitive emphasis and dosage shape development.
- Jeon^s, M., Kaufman, C. and Rabe-Hesketh, S. Monte Carlo local likelihood for estimating generalized linear mixed models.
- Jeon^s, M., Rijmen, F. and Rabe-Hesketh, S. A variational maximization-maximization algorithm for generalized linear mixed models with crossed random effects.
- Jeon^s, M. and Rabe-Hesketh, S. Autoregressive growth model for longitudinal item analysis.
- Breinegaard^s, N., Rabe-Hesketh, S. and Skrondal, A. Pairwise residuals and diagnostic tests for misspecified dependence structures in models for binary longitudinal data

PEER-REVIEWED JOURNAL ARTICLES (111)

frequently cited (ISI): *: ≥ 20 , **: ≥ 50 , ***: ≥ 100 , ****: ≥ 300 , ****: ≥ 500 student: ^s, postdoc: ^p

in press

Breinegaard^s, N., Rabe-Hesketh, S. and Skrondal, A. Transition model test for serial dependence in mixed-effects models for binary data. *Statistical Methods in Medical Research*.

- Chung^p, Y., Gelman, A., Rabe-Hesketh, S., Liu, S. and Dorie, V. (2015). Weakly informative prior for point estimation of covariance matrices in hierarchical linear models. *Journal of Educational and Behavioral Statistics* 40, 136-157.
- Harvey, A. G., Soehner, A. M., Kaplan, K. A., Hein, K., Lee, J., Kanady, J., Li, D., Rabe-Hesketh, S., Ketter, T. A., Neylan, T. C. and Buysse, D. J. (2015). Treating insomnia improves sleep, mood and functioning in bipolar disorder: A pilot randomized controlled trial. *Journal of Consulting and Clinical Psychology* 83, 564-577.
- Fuller, B., Bein, E., Kim, Y., and Rabe-Hesketh, S. (2015). Differing cognitive trajectories of Mexican-American toddlers - The role of class, nativity, and maternal practices. *Hispanic Journal of Behavioral Sciences* 37, 139-169.

- Skrondal, A. and Rabe-Hesketh, S. (2014). Protective estimation of mixed-effects logistic regression when data are not missing at random. *Biometrika* 101, 175-188.
- Skrondal, A. and Rabe-Hesketh, S. (2014). Handling initial conditions and endogenous covariates in dynamic/transition models for binary data with unobserved heterogeneity. *Journal of the Royal Statistical Society, Series C* 63, 211-237.
- Cho, S.-J., de Boeck, P., Embretson, S. and Rabe-Hesketh, S. (2014). Additive multilevel item structure models with random residuals: Item modeling for explanation and item generation. *Psychometrika* 79, 84-104.
- Castellano^p, K. E., Rabe-Hesketh, S. and Skrondal, A. (2014). Composition, context, and endogeneity in school and teacher comparisons. *Journal of Educational and Behavioral Statistics* 39, 333-367.
- Miranda, A. and Rabe-Hesketh, S. (2014). Missing ordinal covariates with informative selection. Journal of the Royal Statistical Society, Series A 177, 319-344.
- Bates, M.^s, Castellano^p, K. E., Rabe-Hesketh, S. and Skrondal, A. (2014). Handling correlations between covariates and random slopes in multilevel models. *Journal of Educational and Behavioral Statistics* 39, 524-549.
- Jeon, M., Rijmen, F. and Rabe-Hesketh, S. (2014). Flexible item response theory modeling with FLIRT. Applied Psychological Measurement 38, 404-405.
- Rijmen, F., Jeon^p, M., von Davier, M. and Rabe-Hesketh, S. (2014). A third-order item response theory model for modeling the effects of domains and subdomains in large-scale educational assessment surveys. *Journal of Educational and Behavioral Statistics* 39, 245-256.

- Rabe-Hesketh, S. and Skrondal, A. (2013). Avoiding biased versions of Wooldridge's simple solution to the initial conditions problem. *Economics Letters* 120, 346-349.
- Ayers^p, E., Rabe-Hesketh, S., and Nugent, R. (2013). Incorporating student covariates in cognitive diagnosis models. *Journal of Classification* 30, 195-224.
- Chung^p, Y., Rabe-Hesketh, S., Dorie, V., Gelman A. and Liu, J. (2013). A nondegenerate penalized likelihood estimator for variance parameters in multilevel models. *Psychometrika* 78, 685-709.
- Chung^p, Y., Rabe-Hesketh, S. and Choi^s, I.-H. (2013). Avoiding zero between-study variance estimates in random-effects meta-analysis. *Statistics in Medicine* 32, 4071-4089.
- Jeon^s, M., Rijmen, F. and Rabe-Hesketh, S. (2013). Modeling differential item functioning using a generalized multiple-group bifactor model. *Journal of Educational and Behavioral Statistics* 38, 32-60.
- Roberts, E. S., Chana, G., Nguyen, T. B., Perera, G., Landau, S., Rabe-Hesketh, S., Glass, J. D. McArthur, J. and Everall, J. P. (2013). The spatial relationship between neurons and astrocytes in HIV-associated dementia. *Journal of NeuroVirology* 19, 123-130.

- Feldman^p, B. and Rabe-Hesketh, S. (2012). Modeling achievement trajectories when attrition is informative. Journal of Educational and Behavioral Statistics 37, 703-736.
- Jeon^s, M. and Rabe-Hesketh, S. (2012). Profile-likelihood approach for estimating generalized linear mixed models with factor structures. *Journal of Educational and Behavioral Statistics* 37, 518-542.

2011

- Cho^p, S.-J. and Rabe-Hesketh, S. (2011). Alternating imputation posterior estimation of models with crossed random effects. *Computational Statistics and Data Analysis* 55, 12-25.
- Dearden, L., Miranda, A. and Rabe-Hesketh, S. (2011). Measuring school value added with administrative data: The problem of missing variables. *Fiscal Studies* 32, 263-278.

2010

- Fuller, B., Bein, E., Bridges, B., Halfon, N., Jung, S., Rabe-Hesketh, S., and Kuo, A. (2010). Maternal practices that influence Latino infants' health and cognitive growth. *Pediatrics* 125, 324-332.
- Katzman, M. A., Bara-Carril, N., Rabe-Hesketh, S., Schmidt, U., de Silva, P., Troop, N. and Treasure, J. (2010). A randomized controlled two stage trial in the treatment of bulimia nervosa comparing CBT versus motivational enhancement in phase 1 followed by group versus individual CBT in phase 2. *Psychosomatic Medicine* 72, 656-663.

2009

- Skrondal, A. and Rabe-Hesketh, S. (2009). Prediction in multilevel generalized linear models. Journal of the Royal Statistical Society, Series A 172, 659-687. *
- Anderluh, M., Tchanturia, K., Rabe-Hesketh, S., Collier, D., and Treasure, J. (2009). Lifetime course of eating disorders: Design and validity testing of a new strategy to define the eating disorders phenotype. *Psychological Medicine* 39, 105-114. *
- Collishaw, S., Goodman, R., Ford, T., Rabe-Hesketh, S. and Pickles, A. (2009). How far are associations between child, family and community factors and child psychopathology informant-specific and informant-general? *The Journal of Child Psychology and Psychiatry* 50, 571-580.
- Fuller, B., Bridges, B., Jang, H., Jung, S., Rabe-Hesketh, S., Bein, E., Halfon, N. and Kuo, A. (2009). The health and cognitive growth of Latino toddlers – At risk or immigrant paradox? *Maternal and Child Health Journal* 13, 755-768. *
- Hayward, P., David, A. S., Green, N., Rabe-Hesketh, S., Haworth, E., Thompson, N., Schaffer S., Hastilow, S. and Wykes T. (2009). Promoting therapeutic alliance in Clozapine users: An exploratory randomised controlled trial. *Clinical Schizophrenia & Related Psychoses* 3, 127-132.

2008

- Rabe-Hesketh, S., Skrondal, A. and Gjessing, H. K. (2008). Biometrical modeling of twin and family data using standard software for mixed models. *Biometrics* 64, 280-288. *
- Rabe-Hesketh, S. and Skrondal, A. (2008). Classical latent variable models for medical research. Statistical Methods in Medical Research 17, 5-32. *

- Rabe-Hesketh, S. and Skrondal, A. (2007). Multilevel and latent variable modelling with composite links and exploded likelihoods. *Psychometrika* 72, 123-140.
- Skrondal, A. and Rabe-Hesketh, S. (2007). Latent variable modelling: A survey. Scandinavian Journal of Statistics 34, 712-745. *

- Skrondal, A. and Rabe-Hesketh, S. (2007). Redundant overdispersion parameters in multilevel models for categorical responses. *Journal of Educational and Behavioral Statistics* 32, 419-430.
- Zheng^s, X. and Rabe-Hesketh, S. (2007). Estimating parameters of dichotomous and ordinal item response models using gllamm. *The Stata Journal* 7, 313-333. *
- Eranti, S., Mogg, A., Pluck, G., Landau, S., Purvis, R., Brown, R. G., Howard, R., Knapp, M., Philpot, M., Rabe-Hesketh, S., Romeo, R., Rothwell, J., Edwards, D. and McLoughlin, D. M. (2007). A randomised controlled trial with six-month follow-up of repetitive transcranial magnetic stimulation and electroconvulsive therapy for severe depression. *American Journal* of Psychiatry 164, 73-81. **
- Kravariti, E., Morris, R. G., Rabe-Hesketh, S., Murray R. M. and Frangou, S. (2007). Comparative profile analysis of cognitive function in recent-onset and chronic patients with adolescent-onset schizophrenia. *Schizophrenia Research* 94, 240-244.
- Ma, X. H., Wang, Q., Sham, P. C., Liu, X. H., Rabe-Hesketh, S., Sun, X. L., Hu, J. M., Meng, H. Q., Chen, W., Chen, E. Y. H., Deng, W., Chan, R. C. K., Murray, R. M., Collier, D. A. and Li, T. (2007). Neurocognitive deficits in first-episode schizophrenic patients and their first-degree relatives. American Journal of Medical Genetics Part B-Neuropsychiatric Genetics 144, 407-416. *

- Rabe-Hesketh, S. and Skrondal, A. (2006). Multilevel modeling of complex survey data. Journal of the Royal Statistical Society, Series A 169, 805-827. ***most downloaded JRSSA paper in 2006–2009
- Bolton, D., Eley, T. C., O'Connor, T. G., Perrin, S., Rabe-Hesketh, S., Rijsdijk, F. and Smith, P. (2006). Prevalence and genetic and environmental influences on anxiety disorders in 6-year-old twins. *Psychological Medicine* 36, 335-344. *
- Carcani-Rathwell, I., Rabe-Hesketh, S. and Santosh, P. J. (2006). Repetitive and stereotyped behaviours in pervasive developmental disorders. The Journal of Child Psychology and Psychiatry 47, 573-81. **
- Miranda, A. and Rabe-Hesketh, S. (2006). Maximum likelihood estimation of endogenous switching and sample selection models for binary, count, and ordinal variables. *The Stata Journal* 6, 285-308. *
- Schulze, K., MacCabe, J. H., Rabe-Hesketh, S., Crawford, T., Marshall, N., Zanelli, J., Walshe, M., Bramon, E., Murray, R. M. and McDonald, C. (2006). The relationship between eye movement and brain structural abnormalities in patients with schizophrenia and their unaffected relatives. *Journal of Psychiatric Research* 40, 589-598.

2005

- Rabe-Hesketh, S., Skrondal, A. and Pickles, A. (2005). Maximum likelihood estimation of limited and discrete dependent variable models with nested random effects. *Journal of Econometrics* 128, 301-323. ***
- Zanelli, J., Simon, H., Rabe-Hesketh, S., Walshe, M., McDonald, C., Murray, R. M. and MacCabe, J. H. (2005). Eye tracking in schizophrenia: Does the antisaccade task measure anything that the smooth pursuit task does not? *Psychiatry Research* 136, 181-188.

- Rabe-Hesketh, S., Skrondal, A. and Pickles, A. (2004). Generalized multilevel structural equation modeling. *Psychometrika* 69, 167-190. ***
- Landau, S., Rabe-Hesketh, S. and Everall, I. (2004). Nonparametric one-way analysis of variance of replicated bivariate spatial point patterns. *Biometrical Journal* 46, 19-34.

- Bramon, E., Rabe-Hesketh, S., Sham, P., Murray, R. M. and Frangou, S. (2004). Meta-analysis of the P300 and P50 waveforms in schizophrenia. *Schizophrenia Research* 70, 315-329. ***
- Cervilla, J., Prince, M., Rabe-Hesketh, S. (2004). Vascular disease risk factors as determinants of incident depressive symptoms: A prospective community-based study. *Psychological Medicine* 43, 635-641.
- Ettinger, U., Kumari, V., Crawford, T. J., Corr, P. J., Das, M., Zachariah, E., Hughes, C., Sumich, A. L., Rabe-Hesketh, S. and Sharma, T. (2004). Smooth pursuit and antisaccade eye movements in siblings discordant for schizophrenia. *Journal of Psychiatric Research* 38, 177-184. **
- Gudjonsson, G. H., Rabe-Hesketh, S. and Szmukler, G. (2004). Management of psychiatric inpatient violence: Patient ethnicity and use of medication, restraint and seclusion. British Journal of Psychiatry 184, 258-262. *
- Ismail, K., Winkley, K. and Rabe-Hesketh, S. (2004). Systematic review and meta-analysis of randomised controlled trials of psychological interventions to improve glycaemic control in patients with type 2 diabetes. *The Lancet* 363, 1589-1597. ***
- Kuipers, E., Holloway, F., Rabe-Hesketh, S. and Tennakoon, L. (2004). An RCT of early intervention in psychosis: Croydon Outreach and Assertive Support Team (COAST). Social Psychiatry and Psychiatric Epidemiology 39, 358-363. *
- McDonald, C., Zanelli, J., Rabe-Hesketh, S., Ellison-Wright, I., Sham, P., Kalidindi, S., Murray, R. M. and Kennedy, N. (2004). Meta-analysis of magnetic resonance imaging brain morphometry studies in bipolar disorder. *Biological Psychiatry* 56, 411-417. ***
- Rutter, S., Gudjonsson, G. and Rabe-Hesketh, S. (2004). Violent incidents in a medium secure unit: The characteristics of persistent perpetrators of violence. *Journal of Forensic Psychiatry and Psychology* 15, 293-302.
- Tchanturia, K., Anderluh, M.B., Morris, R.G., Rabe-Hesketh, S., Collier, D.A., Sanchez, P. and Treasure, J. L. (2004). Cognitive flexibility in anorexia nervosa and bulimia nervosa. *Journal* of the International Neuropsychological Society 10, 513-520. **
- Toulopoulou, T., Grech, A., Morris, R. G., Schulze, K., McDonald, C., Chapple, B., Rabe-Hesketh, S. and Murray, R. M. (2004). The relationship between volumetric brain changes and cognitive function: A family study on schizophrenia. *Biological Psychiatry* 56, 447-653. **

- Skrondal, A. and Rabe-Hesketh, S. (2003). Multilevel logistic regression for polytomous data and rankings. *Psychometrika* 68, 267-287. **
- Rabe-Hesketh, S., Pickles, A. and Skrondal, A. (2003). Correcting for covariate measurement error in logistic regression using nonparametric maximum likelihood estimation. *Statistical Modelling* 3, 215-232. *
- Rabe-Hesketh, S., Skrondal, A. and Pickles, A. (2003). Maximum likelihood estimation of generalized linear models with covariate measurement error. *The Stata Journal* 3, 385-410.
- Skrondal, A. and Rabe-Hesketh, S. (2003). Some applications of generalized linear mixed models in epidemiology: Repeated measures, measurement error and multilevel modelling. Norwegian Journal of Epidemiology 13, 265-278. *
- Anderluh, M. B., Tchanturia, K., Rabe-Hesketh, S. and Treasure, J. (2003). Childhood obsessivecompulsive personality traits in adult women with eating disorders: Defining a broader eating disorder phenotype. *American Journal of Psychiatry* 160, 242-247. ***
- Fleminger, S., Oliver, D. L., Lovestone. S., Rabe-Hesketh, S. and Giora, A. (2003). Head injury as a risk factor for Alzheimer's disease; the evidence ten years on. A partial replication. *Journal* of Neurology, Neurosurgery & Psychiatry 74, 857-862. ***

- Karwautz, A., Troop, N. A., Rabe-Hesketh, S., Collier, D. A. and Treasure, J. L. (2003). Personality disorders and personality dimensions in anorexia nervosa. *Journal of Personality Disorders* 17, 73-85.
- Kravariti, E., Morris, R. G., Rabe-Hesketh, S., Murray, R. M. and Frangou, S. (2003). The Maudsley early onset schizophrenia study: Cognitive function in adolescents with recent onset schizophrenia. Schizophrenia Research 61, 137-148. **
- Kravariti, E., Morris, R. G., Rabe-Hesketh, S., Murray, R. M. and Frangou, S. (2003). The Maudsley early onset schizophrenia study: Cognitive function in adolescents-onset schizophrenia. *Schizophrenia Research* 65, 95-103. *
- Patel, V., Chisholm, D., Rabe-Hesketh, S., Dias-Saxena, F., Andrew, G. and Mann, A. (2003). The treatment of common mental disorders in a developing country: A randomized controlled trial of the efficacy and cost-effectiveness of antidepressant and psychological treatments in general health care from Goa, India. *The Lancet* 361, 33-39. ***
- Toulopoulou, T., Morris, R. G., Rabe-Hesketh, S. and Murray, R. M. (2003). Selectivity of verbal memory deficit in schizophrenic patients and their relatives. American Journal of Medical Genetics-Neuropsychiatric Genetics 116, 1-7. **
- Toulopoulou, T., Rabe-Hesketh, S., King, H., Murray, R. M. and Morris, R. G. (2003). Episodic memory in schizophrenic patients and their relatives. *Schizophrenia Research* 63, 261-271. ** 2002
- Rabe-Hesketh, S., Skrondal, A. and Pickles, A. (2002). Reliable estimation of generalized linear mixed models using adaptive quadrature. *The Stata Journal* 2, 1-21. ***
- Ettinger, U., Kumari, V., Chitnis, X. A., Corr, P. J., Sumich, A. L., Rabe-Hesketh, S., Crawford, T. J. and Sharma, T. (2002). Relationship between brain structure and saccadic eye movements in healthy humans. *Neuroscience Letters* 328, 225-8.
- Ferri, C. P., Gossop, M., Rabe-Hesketh, S. and Laranjeira, R. (2002). Differences in factors associated with first treatment entry and treatment re-entry among cocaine users. Addiction 97, 825-832.
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BOOK CHAPTERS (14)

- Rabe-Hesketh, S. and Skrondal, A. (forthcoming). Generalized linear latent and mixed models. In van der Linden, W. J. and Hambleton, R. K. (Eds.) Handbook of Item Response Theory: Models, Statistical Tools, and Applications. Boca Raton, FL: Chapman & Hall/CRC Press, volume 1, chapter 30.
- Rabe-Hesketh, S. and Skrondal, A. (forthcoming). GLLAMM software. In van der Linden, W. J. and Hambleton, R. K. Handbook of Item Response Theory: Models, Statistical Tools, and Applications. Boca Raton, FL: Chapman & Hall/CRC Press, volume 3, chapter 30.
- Rijmen, F., Jeon, M. and Rabe-Hesketh, S. (forthcoming). Variational approximation methods for IRT. In van der Linden, W. J. and Hambleton, R. K. Handbook of Item Response Theory: Models, Statistical Tools, and Applications. Boca Raton, FL: Chapman & Hall/CRC Press, volume 2, chapter 14.
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Other publications (52)

frequently cited (ISI): *: ≥ 20 , **: ≥ 50 , ***: ≥ 100 , ****: ≥ 300

Articles in non-peer-reviewed journals (2)

- Rabe-Hesketh, S., and Pickles, A., and Skrondal, A. (2001). GLLAMM: A class of models and a Stata program. *Multilevel Modelling Newsletter* 13, 17-23. *
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- Rabe-Hesketh, S. (1998). Backward shift operator and forward shift operator. In *Encyclopedia of Biostatistics*. New York: Wiley. Vol. 1, pp. 242-243.

Published conference papers (6)

- Zheng, X., Rabe-Hesketh, S. and Skrondal, A. (2006). Multilevel structural equation modeling of ordinal responses. 2006 Proceedings of the American Statistical Association. Alexandria, VA: American Statistical Association, pp. 1972-1979.
- Skrondal, A. and Rabe-Hesketh, S. (2004) Generalized linear latent and mixed models with composite links and exploded likelihoods. In Biggeri, A., Dreassi, E., Lagazio, C. and Marchi, M. (Eds.), *Proceedings of the 19th International Workshop on Statistical Modeling*. Florence, Italy, pp. 27-39.
- Skrondal, A. and Rabe-Hesketh, S. (2003). Generalized linear mixed models for nominal data. 2003 Proceedings of the American Statistical Association. Alexandria, VA: American Statistical Association, pp. 3931-3936.
- Rabe-Hesketh, S. and Pickles, A. (1999). Generalized linear latent and mixed models. In Friedl, H., Bughold, A. and Kauermann, G. (Eds.), *Proceedings of the 14th International Workshop* on Statistical Modelling, Graz, Austria, pp. 332-339.
- Mardia, K. V., Rabe, S. and Kent, J. T. (1995). Statistics, shape and images. In Titterington, D. M. (Ed.), *IMA Proceedings on Complex Stochastic Systems and Engineering*. Oxford: Clarendon Press, pp. 85-103.
- Kent, J. T., Mardia, K. V. and Rabe, S. (1994). Face description from laser range data. In Proceedings on Mathematical Methods in Medical Imaging III. Bellingham: SPIE, pp. 32-45.

Letters, technical reports, discussions, editorials, book and software reviews (11)

- Miranda, A., Rabe-Hesketh, S. and McDonald, J. W. (2012). Reducing bias due to missing values of the response variable by joint modeling with an auxiliary variable. *Department of Quantitative Social Science Working Paper*, No. 12-05. Institute of Education, University of London.
- Chung, Y., Rabe-Hesketh, S., Gelman, A., Liu, J. and Dorie, V. (2012). Avoiding boundary estimates in linear mixed models through weakly informative priors. UC Berkeley Division of Biostatistics Working Paper Series, No. 284. University of California, Berkeley, CA.
- Miranda, A. and Rabe-Hesketh, S. (2010). Missing ordinal covariates with informative selection. Department of Quantitative Social Science Working Paper, No. 10-16. Institute of Education, University of London.
- Skrondal, A. and Rabe-Hesketh, S. (2008). Latent variable modeling (Editorial). Statistical Methods in Medical Research 17, 1-2.
- Heller, J. I., Curtis, D. A., Rabe-Hesketh, S., Clarke, C., Ramirez, A. and Verboncoeur, C. J. (2007). The effects of math pathways and pitfalls lessons on students' mathematics achievement. National Science Foundation Final Report.
- Skrondal, A. and Rabe-Hesketh, S. (2004). Book review of "Topics in Modelling of Clustered Data" edited by M. Aerts, H. Geys, G. Molenberghs and L. M. Ryan. *Statistics in Medicine* 23, 3552-3553.
- Wright, I., Rabe-Hesketh, S., Mellers, J., Bullmore, E. T. and Murray, R. (1999). Testing for laterality differences in regional brain volumes (Letter). Archives of General Psychiatry 57, 511.

- Landau, S. and Rabe-Hesketh, S. (1999). Software review of StatView. Statistical Methods in Medical Research 8, 337-341.
- Rabe-Hesketh, S. (1997). Analyis of medical images (Editorial). Statistical Methods on Medical Research 6, 189-190.
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Abstracts in the ISI Web of Science (27)

See http://www.researcherid.com/rid/B-1643-2008 for details

GRANTS

- 2014-2019. Harvey, A. (PI) "A Transdiagnostic Sleep and Circadian Treatment to Improve Community SMI Outcomes." National Institute of Mental Health (NIMH) \$823,705. Co-investigator
- 2014-2016. Gelman, A., Rabe-Hesketh, S. and Carpenter, R. (PIs). "Solving Difficult Bayesian Computation Problems in Education Research Using Stan." U.S. Department of Education, Institute of Education Sciences (IES). \$750,981. Co-Principal Investigator.
- 2012-2017 Harvey, A. (PI) "Triple Vulnerability? Circadian Tendency, Sleep Deprivation and Adolescence." National Institute of Child Health and Development (NICHD). \$629,619. Coinvestigator.
- 2012-2015 Harvey, A. (PI) "Improving Depression Outcome by Enhancing Memory for Cognitive Therapy." National Institute of Mental Health (NIMH). \$221,999. Co-investigator.
- 2011-2015 Wilson, M. and Rabe-Hesketh, S. (PIs). "Berkeley Research Experience and Methodology (BREM) Program." (Postdoctoral Fellowships.) U.S. Department of Education, Institute of Education Sciences (IES). \$681,680. Co-Principal Investigator.
- 2011-2014 Rijmen, F., von Davier, M., and Rabe-Hesketh, S. (PIs). "New Psychometric Models for 21st-Century Educational Survey Assessments." U.S. Department of Education, Institute of Education Sciences. \$1,197,301. Co-Principal Investigator.
- 2010-2013 Gelman, A., Rabe-Hesketh, S. (PIs), and Liu, J. "Practical Tools for Multilevel/Hierarchical Modeling in Education Research." U.S. Department of Education, Institute of Education Sciences. \$798,020. Co-Principal Investigator.
- 2008-2010 Dearden, L. (PI), Brown, J. J., Hansen, K., McDonald, J. W., Rabe-Hesketh, S. and Vignoles, A. "Administrative Data – Methods, Inference and Network." Node of the National Center for Research Methods. Economic and Social Research Council (UK). £1,336,000 Coinvestigator (Director for Methodology).
- 2007-2011 Wilson, M. and Rabe-Hesketh, S. (PIs). "Berkeley Research Experience and Methodology (BREM) Program." (Postdoctoral Fellowships.) U.S. Department of Education, Institute of Education Sciences. \$624,400. Co-Principal Investigator.
- 2001-2004 McLoughlin, D. (PI), Brown, R., Rothwell, J., Knapp, M., Rabe-Hesketh, S., Edwards, D., Blanchard, M., Carter, J., Howard, R. and Philpot, M. "Clinical Effectiveness and Cost of Repetitive Transcranial Magnetic Stimulation Versus ECT in Severe Depression: A Multi-Centre Randomized Controlled Trial and Economic Analysis." NHS Health and Technology Assessment Programme (UK). £469,400. Co-investigator.

- 2002-2005 Ismail, K. (PI), Chalder, T., Thomas, S., Treasure, J., Schmidt, U., Rabe-Hesketh, S., Jones, R. and Patel, A. "A Randomised Controlled Trial of Cognitive Behaviour Therapy and Motivational Interviewing for People with Type I Diabetes Mellitus and Suboptimal Glycaemic Control." NHS Health and Technology Assessment Programme (UK). £568,989. Co-investigator.
- 2000-2003 Schmidt, U. (PI), Treasure, J., Eisler, I., Dare, C., Beecham, J. K., Rabe-Hesketh, S. "A Randomised Controlled Evaluation of the Cost Effectiveness of Cognitive-Behavioural Guided Self-Care Versus Family Therapy for Adolescent Bulimia Nervosa in a Catchment Area-Based Population." PPP Healthcare Medical Trust (UK). £197,000. Co-investigator.

Invited talks (excluding keynotes) since 2003

- "Using Warm's weighted likelihood estimates as response variable: An alternative to plausible values", 3rd Workshop on Statistical Methods in Cognitive Assessments, Fudan University, Shanghai, China, 2014.
- "Predicting outcomes using generalized linear mixed models" Eastern North American Region of the Biometric Society (ENAR) 2014 Spring Meeting, Baltimore, MD, USA, 2014.
- "How to write a successful statistics book" (with Anders Skrondal), *Joint Statistical Meetings*, Montreal, QE, Canada, 2013. (Roundtable discussion)
- "Autoregressive IRT model for longitudinal item analysis" 2nd Workshop on Statistical Methods in Cognitive Assessments, Columbia University, New York, USA, 2013.
- "Value-added modeling: Is it dangerous?" Graduate School of Education, University of California, Berkeley, CA, USA, 2013. (Seminar)
- "Protective estimation of random intercept logistic regression when data are not missing at random", 21st Australian Statistical Conference, Adelaide, SA, Australia, 2012.
- "Protective estimation of random intercept logistic regression when data are not missing at random", Joint Statistical Meetings, San Diego, CA, USA, 2012.
- "Automatic protection against sample selection bias in models for binary panel data". Institute of Education, University of London, UK, 2012. (Seminar)
- "Multilevel latent variable modeling applied to a sex education study and more". Graduate School of Education, *Harvard University*, Cambridge, MA, USA, 2012. (Seminar)
- "Modeling perspectives on deriving teacher value added from student test scores", *Grading Teachers:* Measures, Media & Policies, Public Forum, University of California, Berkeley, CA, USA, 2010.
- "Missing covariates with informative selection" (with Alfonso Miranda), *Institute of Education*, University of London, UK, 2009. (Seminar)
- "Prediction in multilevel logistic regression". London School of Hygiene and Tropical Medicine, London, UK, 2009. (Seminar)
- "Multilevel structural equation modeling: Comparing frameworks". XXIX International Congress of Psychology 2008 (ICP 2008), Berlin, Germany, 2008.
- "Multilevel Structural Equation Modeling". Department of Statistics and Econometrics, University of Geneva, Geneva, Switzerland, 2008. (Seminar)
- "Prediction in multilevel logistic regression". Department of Biostatistics, University of Washington, Seattle, WA, USA, 2008. (Seminar)
- "Generalized linear latent and mixed models for multilevel IRT". *Educational Testing Service* (ETS), Princeton, NJ, USA, 2008.

- "Multilevel modeling of categorical data". Methods of Analysis Program in the Social Sciences, Stanford University, CA, USA, 2008. (Seminar)
- "Comparison of methods for handling endogenous covariates in longitudinal data". Institute of Education, University of London, UK, 2008. (Seminar)
- "Multilevel structural equation modeling". Quantitative Methods in the Social Sciences Colloquium, University of California, Santa Barbara, CA, USA, 2007. (Seminar)
- "Multilevel modeling of complex survey data". *Institute of Education*, University of London, UK, 2007. (Seminar)
- "Multilevel models for health services research". Health Services & Policy Analysis Doctoral Seminar, School of Public Health, University of California, Berkeley, 2007. (Seminar)
- "Multilevel and latent variable modeling of complex survey data". 34th Annual Meeting of the Statistical Society of Canada, London, ON, Canada, 2006.
- "Multilevel structural equation modeling". Economic and Social Research Council Research Methods Festival. Oxford University, Oxford, UK, 2006.
- "Multilevel Structural Equation Modeling". Institute of Education, University of London, UK, 2006. (Seminar)
- "Multilevel and latent variable modeling of complex survey data". International Meeting of the Psychometric Society. Tilburg, the Netherlands, 2005.
- "Generalized linear latent and mixed models for nominal responses". Division of Biostatistics, University of California, San Francisco, CA, USA, 2005. (Seminar)
- "Generalized linear latent and mixed models". Class on Structural Equation Modeling by Ken Bollen. University of North Carolina, Chapel Hill, NC, USA, 2005. (Guest lecture)
- "On the use of composite links in multilevel latent variable models". 24th Biennial Conference of the Society for Multivariate Analysis in the Behavioral Sciences. Jena, Germany, 2004.
- "Generalized linear latent and mixed models". Annual Meeting of the National Council on Measurement in Education, San Diego, CA, USA, 2004.
- "Multilevel modeling of discrete responses". Center on Quantitative Social Science Research, University of California, Davis, CA, USA, 2004. (Seminar)
- "Latent variable models for a cluster-randomized trial of sex education with drop-out". Center for AIDS Prevention Studies. San Francisco, CA, USA, 2004. (Seminar)
- "Multilevel and mixed models in epidemiology". Division of Epidemiology, School of Public Health, University of California, Berkeley, CA, USA, 2004. (Seminar)
- "Multilevel modeling of polytomous data and rankings: Application to election research". Neyman Semminar. Department of Statistics, University of California, Berkeley, CA, USA, 2003. (Seminar)
- "Generalized linear latent and mixed modeling". California Center for Population Research and Department of Sociology, University of California, Los Angeles, CA, USA, 2003. (Seminar)
- "Generalized linear latent and mixed modeling". Graduate School of Education and Information Studies, University of California, Los Angeles, CA, USA, 2003. (Seminar)
- "Multilevel models for nominal data". Inter-Faculty Statistics Seminar, University of Southampton, UK, 2003. (Seminar)
- "Multilevel modeling of ordered and unordered categorical responses". Department of Epidemiology and Biostatistics, Institute of Child Health, London, UK, 2003. (Seminar)

Invited courses and workshops since 2003

- Short-course on "Multilevel and longitudinal modeling". Institute of Education, University of London, UK, 2012.
- Short-course on "Multilevel and longitudinal modeling" (with Anders Skrondal). Institute of Education, University of London, UK, 2011.
- 3-day course on "Applied Longitudinal Data Analysis" (with Anders Skrondal), University of Oslo School in Biostatistics, Oslo, Norway, 2010.
- Short-course on "Multilevel and longitudinal modeling" (with Anders Skrondal). Institute of Education, University of London, UK, 2010.
- Pre-conference course on "Multilevel modeling of longitudinal survey data" (with Anders Skrondal). International Methodology Symposium, Statistics Canada, Ottawa, ON, Canada, 2009.
- Short-course on "Multilevel and longitudinal modeling" (with Anders Skrondal). Institute of Education, University of London, UK, 2009.
- Pre-conference course on "Generalized linear latent and mixed models" (with Anders Skrondal). XXIV International Biometric Conference (IBC2008), Dublin, Ireland, 2008.
- Pre-conference course on "Generalized linear latent and mixed models" (with Anders Skrondal). Annual Meeting of the Norwegian Statistical Association, Tromsø, Norway, 2007.
- Continuing Education Course on "Generalized linear latent and mixed models" (with Anders Skrondal). *Joint Statistical Meetings* (sponsored by the Biometric Section of American Statistical Association), Seattle, WA, USA, 2006.
- Short course on "Multilevel Modeling using Stata" (with Anders Skrondal). 2006 Summer Update Program in Public Health and Epidemiology. Instituto Nacional de Salud Pública. Cuernavaca, Morelos, Mexico, 2006.
- Pre-conference course on "Longitudinal Modelling for Survey Data". Methodology of Longitudinal Surveys: An International Conference. University of Essex, Colchester, UK, 2006.
- Tutorial on GLLAMM (with Anders Skrondal). Biennial Conference of the "Fachgruppe Methoden und Evaluation" of the German Psychological Society. University of Münster, Germany, 2005.
- Tutorial on "Generalized latent variable modeling of complex survey data" (with Anders Skrondal). Workshop on Latent Variable Models and Complex Survey Data. Montreal, Canada, 2005.
- Workshop on "Generalized linear latent and mixed models" (with Anders Skrondal). 2005 International Chinese Statistical Association Applied Statistics Symposium. Washington DC, USA, 2005.
- Short course on "Multilevel Modeling using the Stata program gllamm" (with Anders Skrondal). 2005 Summer Update Program in Public Health and Epidemiology. Instituto Nacional de Salud Pública. Cuernavaca, Morelos, Mexico, 2005.
- Workshop on "Advances in latent variable modeling" (with Anders Skrondal). Theme year on Latent Variable Models in the Social Sciences. Statistical and Applied Mathematical Sciences Institute. Research Triangle Park, NC, USA, 2005.
- Workshop on "Multilevel modeling of discrete responses". Center on Quantitative Social Science Research, University of California, Davis, CA, USA, 2004.
- Conference workshop on "Generalized linear latent and mixed models" (with Anders Skrondal). 3rd North American Stata Users' Group Meeting. Boston, MA, USA, 2004.
- Continuing Education Course on "Generalized linear latent and mixed models" (with Anders Skrondal and Andrew Pickles). *Joint Statistical Meetings* (sponsored by the Biometric Section of ASA), Toronto, Canada, 2004.
- Pre-conference course on "Generalized linear latent and mixed modeling" (with Anders Skrondal). 19th International Workshop on Statistical Modelling. Florence, Italy, 2004.

- Pre-conference workshop on "Multilevel and latent variable modeling of discrete data" (with Anders Skrondal). 69th Annual Meeting of the Psychometric Society. Pacific Grove (Monterey), CA, USA, 2004.
- Pre-conference course on "Multilevel and latent variable modeling using gllamm" (with Andrew Pickles and Anders Skrondal). International Biometric Society - Nordic Region Conference, Uppsala, Sweden, 2003.
- Short-course on "Latent variable modelling". Centre for Applied Statistics, University of Lancaster, UK, 2003.

Selected contributed/second-authored talks since 2003

student: ^s, postdoc: ^p

- Bates^s, Castellano^p, K., Rabe-Hesketh, S. and Skrondal, A. Handling Correlations Between Covariates and Random Slopes in HLMs. Annual Meeting of the National Council on Measurement in Education. Philadelphia, PA, 2014.
- Jeon^p, M., Kaufman, C. and Rabe-Hesketh, S. Monte Carlo local likelihood for estimating generalized linear mixed models. *International Meeting of the Psychometric Society*. Arnhem, the Netherlands, 2013.
- Jeon^p, M, Rijmen, F. and Rabe-Hesketh, S. A Bifactor Multitrait-Multimethod Model for Educational Assessments. Annual Meeting of the National Council on Measurement in Education. San Francisco, CA, USA, 2013.
- Jeon^s, M. and Rabe-Hesketh, S. An autoregressive IRT growth model for longitudinal item analysis (seminar). Educational Testing Service, Princeton, NJ, 2012.
- Ayers^p, E. and Rabe-Hesketh, S. Cognitive diagnosis models with longitudinal growth curves for skill knowledge (invited talk). *Joint Statistical Meetings*. Miami Beach, FL, USA, 2011.
- Chung^p, Y., Rabe-Hesketh, S., Gelman, A., Liu, J., and Dorie, V. Avoiding boundary estimates in hierarchical linear models through weakly informative priors. *International Meeting of the Psychometric Society.* Hong Kong, 2011.
- Ayers^p, E. and Rabe-Hesketh, S. Cognitive diagnosis models with longitudinal growth curves for skill knowledge. 17th International Meeting of the Psychometric Society. Hong Kong, 2011.
- Skrondal, A. and Rabe-Hesketh, S. Missing data and consistency for a latent variable model widely used in IRT and longitudinal data analysis (invited talk). *International Meeting of the Psychometric Society.* Hong Kong, 2011.
- Rabe-Hesketh, S. and Miranda, A. Combining survey and administrative data to deal with missing ordinal covariates with informative selection. 4th Economic and Social Research Council (ESRC) Research Methods Festival. St Catherine's College, Oxford, UK, 2010.
- Ayers^p, E. and Rabe-Hesketh, S. Latent regression of skill knowledge parameters in cognitive diagnosis models. 75th Annual Meeting of the Psychometric Society, The University of Georgia, GA, USA, 2010.
- Feldman^p, B. and Rabe-Hesketh, S. Modeling non-informative dropout in longitudinal data. International Meeting of the Psychometric Society, St John's College, Cambridge, UK 2009.
- Cho^p, S.-J. and Rabe-Hesketh, S. Shrinkage estimation of item parameters in item response theory. International Meeting of the Psychometric Society, St John's College, Cambridge, UK 2009.
- Zheng^s, X. and Rabe-Hesketh (2009). School effects, course taking, and mathematics learning: Perspectives from the National Assessment of Educational Progress. American Educational Research Association, San Diego, CA.

- Cho^p, S.-J. and Rabe-Hesketh, S. Alternating imputation posterior estimation of models with crossed random effects. 73rd Annual Meeting of the Psychometric Society, Durham, NH, USA, 2008.
- Rabe-Hesketh, S. and Skrondal, A. Prediction in multilevel logistic regression. *Fall North American Stata Users Group Meeting*, San Francisco, CA, USA, 2008.
- Jeon^s, M. and Rabe-Hesketh, S. Multilevel modeling of educational longitudinal data with crossed random effects. *Fall North American Stata Users Group Meeting*, San Francisco, CA, 2008.
- Rabe-Hesketh, S. Prediction for multilevel models. UK Stata Users Group Meeting, London, UK, 2008.
- Skrondal, A. and Rabe-Hesketh, S. Generalised multilevel structural equation modeling (keynote lecture). 23rd Workshop on Item Response Theory, University of Twente, Enschede, the Netherlands, 2007.
- Skrondal, A. and Rabe-Hesketh, S. Prediction in generalised linear mixed models (invited talk). Meeting on Recent Advances in Multilevel Modelling, *Royal Statistical Society*, London, 2007.
- Rabe-Hesketh, S. and Skrondal, A. Multilevel modeling of survey data. West Coast Stata Users Group Meeting, Marina del Rey, CA, USA, 2007.
- Skrondal, A. and Rabe-Hesketh, S. Generalised multilevel structural equation modeling (keynote lecture). Sixth International Amsterdam Conference on Multilevel Modeling, Amsterdam, the Netherlands, 2007.
- Skrondal, A. and Rabe-Hesketh, S. Some recent developments in latent variable modelling (keynote lecture) 21st Nordic Conference on Mathematical Statistics, Rebild, Denmark, 2006.
- Zheng^s, X. and Rabe-Hesketh, S. Multilevel latent variable modeling: Applications to a reading achievement study. American Educational Research Association, San Francisco, CA, USA, 2006.
- Zheng^s, X. and Rabe-Hesketh, S. Multilevel structural equation model for ordinal responses. *Joint Statistical Meetings*, Seattle, WA, USA, 2006.
- Skrondal, A. and Rabe-Hesketh, S. Multilevel latent growth modeling with dropout depending on the latent trait: A cluster randomized sex education intervention (invited talk). 14th International Meeting of the Psychomtric Society, Tilburg, the Netherlands, 2005.
- Rabe-Hesketh, S. and Skrondal, A. Pseudo maximum likelihood estimation of multilevel generalized linear models. Workshop on Latent Variable Models and Complex Survey Data. Montreal, Canada, 2005.
- Miranda, A. and Rabe-Hesketh, S. Estimation of ordinal response models, accounting for sample selection bias. 11th UK Stata Users Group Meeting, London, UK, 2005.
- Skrondal, A. and Rabe-Hesketh, S. Generalized linear latent and mixed models with composite links and exploded likelihoods (keynote lecture). 19th International Workshop on Statistical Modelling, Florence, Italy, 2004.
- Rabe-Hesketh, S. and Skrondal, A. Empirical Bayes prediction in generalized linear mixed models. 2nd International Biometric Society Conference of the Eastern Mediterranean Region, Antalya, Turkey, 2003.
- Rabe-Hesketh, S., Pickles, A. and Skrondal, A. Generalized latent class modeling using gllamm. 2nd North American Stata Users' Group Meeting, Boston, MA, 2003.
- Rabe-Hesketh, S. and Skrondal, A. Model diagnostics in gllamm. 9th UK Stata Users' Group Meeting, London, UK, 2003.
- Skrondal, A. and Rabe-Hesketh, S. Generalized linear mixed models for nominal data. Joint Statistical Meetings of the American Statistical Association. San Francisco, CA, USA, 2003.

Skrondal, A. and Rabe-Hesketh, S. Generalized multilevel survival analysis. *Fourth International Amsterdam Conference on Multilevel Analysis.* Amsterdam, the Netherlands, 2003.

TEACHING

Graduate School of Education, University of California, Berkeley

- Data Analysis in Education Research I, Fall 2004-2007
- Data Analysis in Education Research II, Spring 2004-2014
- Hierarchical and Longitudinal Modeling, Fall 2005, Spring 2007, Fall 2009, 2011, 2013
- Hierarchical/Multilevel Modeling (Research Group), Fall & Spring 2004-2014

PhD Training Programme at the Institute of Psychiatry, University of London

- Psychometric Test Theory, 1999, 2000, 2002
- Multilevel Modeling, 2001
- Data Description and Presentation, 1994-1998
- Statistical Inference, 1994-1998
- Introductory Statistics, 1999
- Statistics using SPSS, 1999-2003
- Power and Sample Size, 1999-2003
- Epidemiology using Stata, 2000

Doctorate in Clinical Psychology at the Institute of Psychiatry, University of London

- Psychometric Test Theory, 1997-2003
- Health Care Trials, 1997-2003

MSc and Diploma in Therapy with Couples at the Institute of Psychiatry, University of London

• Critical Appraisal of Research Papers, 1997-2001

MBBS (Undergraduate Medicine) at King's College, University of London

• Medical Statistics, 1995-1999

MAJOR UNIVERSITY COMMITTEES

- Committee for Educational Policy (CEP), University of California, Berkeley, Academic Senate, 2010 2012
- Ethical Committee (Research), Institute of Psychiatry, King's College, University of London, 1999 2003

REVIEWING

Selected Statistical Journals (out of 34)

- Journal of the Royal Statistical Society (Series A, B, and C)
- Journal of the American Statistical Association
- The American Statistician

- Biometrika
- Biometrics
- Biostatistics
- Statistical Methods in Medical Research
- Statistics in Medicine
- Psychometrika
- Journal of Educational and Behavioral Statistics
- Psychological Methods

Selected Journals in other Areas (out of 19)

- Science
- Demography
- American Sociological Review
- American Educational Research Journal
- Educational Evaluation and Policy Analysis
- Economics Letters

Grant awarding agencies

- National Science Foundation (NSF), USA
- Economic and Social Research Council (ESRC), UK
- Institute of Education Sciences (IES), USA
- Medical Research Council (MRC), UK
- Wellcome Trust, UK
- Estonian Science Foundation (ESF), Estonia

PROFESSIONAL AFFILIATIONS

- Elected member of the International Statistical Institute
- Elected member of the National Academy of Education
- Fellow of the American Statistical Association
- Fellow of the Royal Statistical Society
- Member of the International Biometric Society
- Member (and president) of the Psychometric Society
- Member of the National Council on Measurement in Education
- Member of the American Educational Research Association