Julius M. Pfadt

Curriculum Vitae

Personal Details

Email julius.pfadt@gmail.com

Nationality German

Born February 1st, 1992

Education

2018 - present **Doctoral candidate**, *Psychology*, Department of Psychological Research Methods, Ulm University
Project title: The Present and Future of Reliability Analysis: Advances in Theory and Practice
Supervisor: Prof. Dr. Morten Moshagen

2016 - 2018 **Master of Science**, *Psychology*, Ulm University
Thesis title: The Performance of Several Chi-Square Corrections for SEM – Evaluation of Two Data Generation Methods for Simulating Multivariate Non-Normal Data
Supervisor: Prof. Dr. Morten Moshagen

2012 - 2016 **Bachelor of Science**, *Psychology*, Ulm University
Thesis title: A Scale for the Measurement of Hate: The Development of a Social-Psychological Instrument
Supervisors: Dr. Stefan Pfattheicher, Prof. Dr. Johannes Keller

Experience

2019 - present **Programmer**, *Jeffrey's Amazing Statistics Program (JASP)*, University of Amsterdam
Contributing to multiple modules and moderating GitHub issues

2019 - 2020 **Organizer**, *Student admissions test*, Ulm University
Piloting a new student admissions test for psychology with a large sample of bachelor students

2017 - 2018 **Research Assistant**, *Department of Psychological Research Methods*, Ulm University

2016 - 2017 **Research Intern**, *Department of Psychological Methods*, University of Amsterdam
Topic: Bayesian statistics
Supervisor: Prof. Dr. Eric-Jan Wagenmakers

Teaching

Instructor

2016 - 2017
2018 - 2019 **Applications of Multivariate Statistics in R**, *Master course*, Ulm University

2017, 2021 **Applications of Evaluation Methods in R**, *Master course*, Ulm University

Publications

In press **Pfadt**, **J. M.**, van den Bergh, D., Sijtsma, K., & Wagenmakers, E.-J. (in press). A tutorial on Bayesian single-test reliability analysis with JASP. *Behavior Research Methods*. https://doi.org/10.3758/s13428-021-01778-0

Pfadt, **J. M.**, van den Bergh, D., & Moshagen, M. (in press). Classical and Bayesian uncertainty intervals for the reliability of multidimensional scales. *Structural Equation Modeling: A Multidisciplinary Journal*. https://doi.org/10.1080/10705511.2022.2124162

Sijtsma, K., & **Pfadt**, **J. M.** (in press). Reliability. In R. Tierney, F. Rizvi, & K. Ercikan (Eds.), *International Encyclopedia of Education* (4th ed.). Elsevier Science. https://doi.org/10.1016/B978-0-12-818630-5.10004-1

2022 **Pfadt**, **J. M.**, & Sijtsma, K. (2022). Statistical properties of lower bounds and factor analysis methods for reliability estimation. In M. Wiberg, D. Molenaar, J. González, J.-S. Kim, & H. Hwang (Eds.), *Quantitative psychology: The 86th Annual Meeting of the Psychometric Society, virtual, 2021* (pp. 51–63). Springer International Publishing. https://doi.org/10.1007/978-3-031-04572-1_5

Pfadt, **J. M.**, van den Bergh, D., & Goosen, J. (2022). *Bayesrel: Bayesian reliability estimation* (Version 0.7.5) [R-package]. CRAN. https://CRAN.r-project.org/package=Bayesrel

Pfadt, **J. M.**, van den Bergh, D., Sijtsma, K., Moshagen, M., & Wagenmakers, E.-J. (2022). Bayesian estimation of single-test reliability coefficients. *Multivariate Behavioral Research*, *57*(4), 620–641. https://doi.org/10.1080/00273171.2021.1891855

2021 Sijtsma, K., & **Pfadt**, **J. M.** (2021a). Part II: On the use, the misuse, and the very limited usefulness of Cronbach's alpha: Discussing lower bounds and correlated errors. *Psychometrika*, *86*(4), 843–860. https://doi.org/10.1007/s11336-021-09789-8

Sijtsma, K., & **Pfadt**, **J. M.** (2021b). Rejoinder: The future of reliability. *Psychometrika*, *86*(4), 887–892. https://doi.org/10.1007/s11336-021-09807-9

Presentations

2021 **International Meeting of the Psychometric Society (IMPS)**, *Virtual Conference*

Presentation: The Reliability of Multidimensional Scales: A Comparison of Confidence Intervals and a Bayesian Alternative

Reviewing

The British Journal of Mathematical and Statistical Psychology

Structural Equation Modeling: A Multidisciplinary Journal

Software

2019 - present **Bayesrel**, *R-package*
Creator and maintainer of the R-package for Bayesian reliability estimation

2020 - present **Reliability and Factor modules in JASP**, *Statistics program*
Maintainer and contributor