# Julius M. Pfadt

### Curriculum Vitae

#### Personal Details

Email julius.pfadt@gmail.com

Nationality German

Born February 1st, 1992

#### Education

2018 - 2023 **Doctorate (summa cum laude)**, Department of Psychological Research Methods,

Ulm University

Project title: The Present and Future of Reliability Analysis: Advances in Theory and

Practice (download thesis)

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

2024 - present **Postdoctoral Researcher**, *Programme group Psychological Methods*, University of Amsterdam

2023 **Postdoctoral Researcher**, *Department of Methodology and Statistics*, Tilburg University

2023 **Researcher (part-time)**, Department of Psychological Research Methods, Ulm University

2019 - present **Contributor**, Jeffrey's Amazing Statistics Program (JASP), University of Amsterdam

Contributing to multiple modules

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

The effects of non-normal data on several chi-square correction statistics for model fit in structural equation modeling

2016 - 2017 Research Intern, Department of Psychological Methods, University of Amsterdam

Topic: Bayesian statistics

Supervisor: Prof. Dr. Eric-Jan Wagenmakers

## **Teaching**

Instructor

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

2018 - 2019

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

#### **Publications**

2023 **Pfadt**, **J. M.**, van den Bergh, D., & Moshagen, M. (2023). Classical and Bayesian uncertainty intervals for the reliability of multidimensional scales. *Structural Equation Modeling: A Multidisciplinary Journal*, 30(3), 349–363. https://doi.org/10.1080/10705511.2022.2124162

Sijtsma, K., & **Pfadt**, **J. M.** (2023). Reliability. In R. J. Tierney, F. Rizvi, & K. Ercikan (Eds.), *International encyclopedia of education* (4th ed., pp. 21–34). Elsevier. https://doi.org/10.1016/B978-0-12-818630-5.10004-1

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

**Pfadt**, **J. M.**, van den Bergh, D., Sijtsma, K., & Wagenmakers, E.-J. (2022). A tutorial on Bayesian single-test reliability analysis with JASP. *Behavior Research Methods*, *55*(3), 1069–1078. https://doi.org/10.3758/s13428-021-01778-0

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

British Journal of Mathematical and Statistical Psychology European Journal of Psychological Assessment Structural Equation Modeling: A Multidisciplinary Journal BMC Medical Research Methodology

#### Software

2019 - present Bayesrel, R-package

Creator and maintainer of the R-package for Bayesian reliability estimation

2020 - present Modules in JASP: Reliability, Factor, SEM, Statistics program Maintainer and contributor

Links

GitHub 🗗

Google Scholar 🗹

Linkedin 🗹

Orcid 🗹

ResearchGate 🗹