

# Julius M. Pfadt

## *Curriculum Vitae*

### Personal Details

Email julius.pfadt@gmail.com  
Nationality German  
Born February 1<sup>st</sup>, 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  
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

- 2023 - present **Researcher (PhD)**, *Department of Psychological Research Methods*, Ulm University
- 2019 - present **Contributor**, *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  
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

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## 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>
- 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](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>

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## 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

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## Reviewing

**British Journal of Mathematical and Statistical Psychology**

**European Journal of Psychological Assessment**  
**Structural Equation Modeling: A Multidisciplinary Journal**

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**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

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**Links**

GitHub [!\[\]\(cbe80b694ebd74fcfe136a095b608235\_img.jpg\)](#)  
Orcid [!\[\]\(27df6be88af07602ea392719b144fe7f\_img.jpg\)](#)  
Google Scholar [!\[\]\(96f0a292e266dbee33329d5ab59a28c7\_img.jpg\)](#)  
Linkedin [!\[\]\(e690b1f92192b826402019fb9f52289a\_img.jpg\)](#)