### MAXIMILIAN LINDE

Unit of Psychometrics and Statistics
Department of Psychology
Faculty of Behavioural and Social Sciences
University of Groningen
Grote Kruisstraat 2/1
9712 TS Groningen, The Netherlands

Last updated: February 23, 2023.

#### Personal

Born on August 14, 1992, in Hameln, Germany German Citizenship

#### EDUCATION

SEP 2019-ONGOING PhD in Statistics University of Groningen, The Netherlands Expected date of graduation: Sep 2023 SEP 2017-Aug 2019 **Neurosciences** MSc in Behavioural and Cognitive (Cognitive Neurosciences and Modelling) University of Groningen, The Netherlands GPA: 8.5/10 (cum laude) OCT 2016-FEB 2017 MSc in Neural and Behavioural Sciences Eberhard Karls University Tübingen, Germany Not finished SEP 2013-Aug 2016 BSc in Psychology University of Groningen, The Netherlands GPA: 9.2/10 (summa cum laude) SEP 2013-Aug 2014 Propedeutic Examination BSc in Psychology University of Groningen, The Netherlands GPA: 9.0/10 (summa cum laude)

#### EMPLOYMENT

SEP 2019—ONGOING PhD in Statistics
University of Gronin

University of Groningen, The Netherlands Expected date of graduation: Sep 2023

SEP 2018-Aug 2019 Student assistant

University of Groningen, The Netherlands Statistical and methodological consultant Submitted

**Linde, M.**, Pittelkow, M.-M., Schwarzbach, N. R., & van Ravenzwaaij, D. (2023). Reputation without practice? A dynamic computational model of the unintended consequences of open scientist reputations. Submitted for publication.

Preprint available at:

https://doi.org/10.31222/osf.io/agvnx

**Linde, M.**, Tendeiro, J. N., & van Ravenzwaaij, D. (2023). Bayes factors for two-group comparisons in Cox regression. Submitted for publication.

Preprint available at:

https://doi.org/10.1101/2022.11.02.22281762

**Linde, M.**, & van Ravenzwaaij, D. (2023). baymedr: An R package and web application for the calculation of Bayes factors for superiority, equivalence, and non-inferiority designs. Submitted for publication.

Preprint available at:

https://doi.org/10.48550/arXiv.1910.11616

Neumann, M., Niessen, A. S. M., **Linde, M.**, Tendeiro, J. N., & Meijer, R. R. (2023). When and why decision makers use algorithms in personnel selection: Stakeholder perceptions, use intentions, and predictive validity. Submitted for publication.

Preprint available at:

https://doi.org/10.31234/osf.io/743hn

In press

van Doorn, J., Haaf, J. M., Stefan, A. M., Wagenmakers, E.-J., Cox, G. E., Davis-Stober, C. P., Heathcote, A., Heck, D. W., Kalish, M., Kellen, D., Matzke, D., Morey, R. D., Nicenboim, B., van Ravenzwaaij, D., Rouder, J. N., Schad, D. J., Shiffrin, R. M., Singmann, H., Vasishth, S., Veríssimo, J., Bockting, F., Chandramouli, S., Dunn, J. C., Gronau, Q. F., Linde, M., McMullin, S. D., Navarro, D., Schnuerch, M., Yadav, H., & Aust, F. (in press). Bayes factors for mixed models: A discussion. *Computational Brain & Behavior*.

https://doi.org/10.1007/s42113-022-00160-3

Heck, D. W., Boehm, U., Böing-Messing, F., Bürkner, P.-C., Derks, K., Dienes, Z., Fu, Q. Gu, X., Karimova, D., Kiers, H. A. L., Klugkist, I., Kuiper, R. M., Lee, M. D., Leenders, R., Leplaa, H. J., **Linde, M.**, Ly, A., Meijerink-Bosman, M., Moerbeek, M., Mulder, J., Palfi, B., Schönbrodt, F. D., Tendeiro, J. N., van den Bergh, D., Van Lissa, C. J., van Ravenzwaaij, D., Vanpaemel, W., Wagenmakers, E.-J., Williams, D. R., Zondervan-Zwijnenburg, M., Hoijtink, H. (in press). A review of applications of the Bayes factor in psychological research. *Psychological Methods*.

https://doi.org/10.1037/met0000454

**Linde, M.**, Tendeiro, J. N., Selker, R., Wagenmakers, E.-J., & van Ravenzwaaij, D. (in press). Decisions about equivalence: A comparison of TOST, HDI-ROPE, and the Bayes factor. *Psychological Methods*.

https://doi.org/10.1037/met0000402

**Linde, M.**, & van Ravenzwaaij, D. (in press). Bayes factor model comparisons across parameter values for mixed models. *Computational Brain & Behavior*.

https://doi.org/10.1007/s42113-021-00117-y

**Linde, M.**, Tendeiro, J. N., Wagenmakers, E.-J., & van Ravenzwaaij, D. (in press). Practical implications of equating equivalence tests: Reply to Campbell and Gustafson (2022). *Psychological Methods*.

Preprint available at:

https://doi.org/10.31234/osf.io/xk43y

Field, S. M., Hoek, J. M., de Vries, Y. A., Linde, M., Pittelkow, M., Muradchanian, J., & van Ravenzwaaij, D. (2021). Rethinking Remdesivir for COVID-19: A Bayesian reanalysis of trial findings. *PLOS ONE*, 16, e0255093.

https://doi.org/10.1371/journal.pone.0255093

### Software

R packages

Linde, M., van Ravenzwaaij, D., & Tendeiro, J. N. (2022). baymedr: Computation of Bayes factors for common biomedical designs. R package version 0.1.1-9000.

Retrieved from:

https://github.com/maxlinde/baymedr

Shiny App A web application accompanying the R package baymedr.

Available at: https://maxlinde.shinyapps.io/baymedr

### MEDIA CONTRIBUTIONS

DEC 2020 Blog post about "Decisions about equivalence: A comparison of TOST, HDI-ROPE, and the Bayes factor" for the blog "Bayesian Spectacles"

https://www.bayesianspectacles.org/preprint-decisions-about-equivalence-a-comparison-of-tost-hdi-rope-and-the-bayes-factor/

## COMPUTER AND PROGRAMMING SKILLS

Skill	Experience	Description
R	Advanced	I use R on a daily basis for data analysis and other tasks. R is my main programming language.
Linux/bash	Advanced	Linux is my operating system of choice. I use bash to automate procedures and to solve problems.
PLEX	Advanced	I write most of my manuscripts and other formats in LATEX.
git	Advanced	I use git for developing my R package and Shiny app, and for local version control of my files.
Shiny	Advanced	I have studies the Shiny framework extensively to build a web application.
JASP, SPSS, G*Power	Advanced	I am proficient in JASP, SPSS, and G*Power, even though I almost never prefer to use them.
Python	Intermediate	I used Python in a machine learning course. Now, I continue learning Python and apply it to personal projects.
HTML, CSS	Intermediate	I learned HTML and CSS to improve Shiny apps. I also programmed my own portfolio website.
Stan, JAGS	Intermediate	I have used Stan and JAGS in several projects for Bayesian modeling.
(R)Markdown	Intermediate	I use (R)Markdown to document code and to write data analysis reports.
SQL	Intermediate	I learned SQL to make myself familiar with databases.
C, C <sup>++</sup>	Basic	I learned the basics of C and $\mathrm{C}^{++}$ partly because I wanted to speed up functions in R.
Java	Basic	I learned the basics of Java to extend an evolutionary model that was written in Java in R.
Perl	Basic	I learned Perl in combination with advanced regular expressions for a project in which statistics are automatically extracted from abstracts.
Matlab	Basic	I have used Matlab during my studies but have not worked much with it ever since.

## TEACHING

FEB 2022-Aug 2022	Supervision of BSc student Empirical prior distributions in Bayesian Cox regression University of Groningen, The Netherlands
FEB 2022-Jul 2022	Statistics 3 (BSc) Statistical consultation; grading reports University of Groningen, The Netherlands
SEP 2021-FEB 2022	Statistics 2 (BSc) Practicals on how to conduct statistical analyses in JASP University of Groningen, The Netherlands
SEP 2021-Nov 2021	Advanced Statistics (MSc) Practicals on how to program in R University of Groningen, The Netherlands
FEB 2021-Jul 2021	Statistics 3 (BSc) Statistical consultation; grading reports University of Groningen, The Netherlands
OCT 2020-Jul 2021	Supervision of BSc student Different likelihood functions in Cox regression University of Groningen, The Netherlands
SEP 2020-FEB 2021	Statistics 2 (BSc) Practicals on how to conduct statistical analyses in JASP University of Groningen, The Netherlands
SEP 2020-Nov 2020	Advanced Statistics (MSc) Practicals on how to program in R University of Groningen, The Netherlands
FEB 2020-Jul 2020	Research Practicum (BSc) Practicals for a group of 6 students; grading reports University of Groningen, The Netherlands
FEB 2020-Jul 2020	Statistics 3 (BSc) Statistical consultation; grading reports University of Groningen, The Netherlands
SEP 2019-Nov 2019	Cognitive Psychology (BSc) Lectures/seminars for a group of 32 students; grading exams University of Groningen, The Netherlands

#### Prizes

#### MAR 2022 Snijders-Kouwer prize (150 $\in$ )

Best PhD student paper of 2021 for

"Linde, M., Tendeiro, J. N., Selker, R., Wagenmakers, E.-J., & van Ravenzwaaij, D. (2021). Decisions about equivalence: A comparison of TOST, HDI-ROPE, and the Bayes factor (2021). *Psychological Methods*. https://doi.org/10.1037/met0000402" University of Groningen, The Netherlands

#### Presentations & Workshops

# MAR 2022 Decisions about equivalence: A comparison of TOST, HDI-ROPE, and the Bayes factor

Presentation for Snijders-Kouwer prize University of Groningen, The Netherlands

# Nov 2021 Bayesian testing of equivalence, non-inferiority, and superiority with baymedr

Workshop together with Don van Ravenzwaaij Nothing But The Truth conference

# $m Jul\ 2021$ baymedr: An R package for the calculation of Bayes factors for equivalence, non-inferiority, and superiority designs

Presentation

Conference of the International Society for Clinical Biostatistics

# Jul 2021 Decisions about equivalence: A comparison of TOST, HDI-ROPE, and the Bayes factor

Presentation

Conference of the Society of Mathematical Psychology

#### Oct 2019 Bayesian hypothesis testing

Workshop together with Don van Ravenzwaaij Research School of Behavioural and Cognitive Neurosciences, University of Groningen, The Netherlands

#### Reviewing for

- Journal of Trial and Error
- Computational Brain and Behavior

#### FURTHER EDUCATION

Nov 2020–Dec 2020 Statistical Consulting to Behavioral Scientists (IOPS)

University of Amsterdam & Leiden University (online)

OCT 2020–DEC 2020 Optimization and Numerical Methods (IOPS)

Catholic University Leuven (online)

Oct 2020-Nov 2020 Mathematical Statistics (IOPS)

University of Groningen, The Netherlands (online)

Sep 2020 What is Psychometrics? (IOPS)

University of Amsterdam (online)

Jun 2020 Introduction to Bayesian Modeling (SMiP/IOPS)

Mannheim University (online)

Jun 2020 Advanced Topics in R (SMiP/IOPS)

Mannheim University (online)

JAN 2020 Statistical Learning (IOPS)

Leiden University

### Professional membership

 ${\small \textbf{SEP}} \ \ 2019 - O{\small \texttt{NGOING}} \quad \textbf{Inter-University} \quad \textbf{graduate} \quad \textbf{school} \quad \textbf{of} \quad \textbf{psychometrics} \quad \textbf{and} \quad$ 

sociometrics (IOPS)

#### LANGUAGES

**German**: Mother tongue **English**: Fluent

**Dutch**: Basic **French**: Basic