PAUL-CHRISTIAN BÜRKNER

GENERAL INFORMATION

Nationality	German
Date of Birth	16 June 1991
Place of Birth	Marburg, Germany
Email	paul.buerkner@gmail.com
Website	https://paul-buerkner.github.io/
Publications	73 (peer-reviewed only)
Funding	950,000 € (third-party only)
Citations	15,465 (source: GoogleScholar)
h-index	30 (source: GoogleScholar)

WORK EXPERIENCE

University of Stuttgart

since 2020   Independent Junior Research Group Leader

Independent Junior Research Group Leader for Bayesian Statistics at the Cluster of Excellence SimTech, University of Stuttgart, Germany.

Aalto University

2019-2020   Postdoctoral Researcher

Research Post-Doc at the chair of Computational Probabilistic Modeling (Prof. Dr. Vehtari), Aalto University, Department of Computer Science, Finland.

University of Münster

2014-2019   Research Associate and Lecturer

Research associate at the chair of Statistics and Methods (Prof. Dr. Holling), University of Münster, Department of Psychology, Germany. Lecturer in Statistics I and II for the Bachelor's Degree Program in Psychology.

HIGHER EDUCATION

PhD in Psychology

2014-2017   University of Münster

Grade: Summa Cum Laude · Institute of Psychology
Title: *Optimal Design and Bayesian Data Analysis*.
Received multiple awards (see the Awards section).

Master of Mathematics

2014-2017   University of Hagen

Grade: 1.3 · Institute of Mathematics
Thesis: *On the Statistics of Curie–Weiss–Distributed Random Variables*.

Master of Psychology

2013-2014   University of Münster

Grade: 1.1 · Institute of Psychology
Thesis: *Adaptive Designs for Logistic Models with False Answers*.

Bachelor of Mathematics

2011-2014   University of Hagen

Grade: 1.7 · Institute of Mathematics
Thesis: *A Hull Operator for Complex Matroids*.

Bachelor of Psychology

2010-2013   University of Münster

Grade: 1.2 · Institute of Psychology
Thesis: *Testing for Publication Bias in Diagnostic Meta-Analysis: A Simulation Study*.

RESEARCH FUNDING

DFG	Bürkner P. C. (2022). Intuitive Joint Priors for Bayesian Multilevel Models. *Funder: German Research Foundation (DFG).* 238,000 €.
DFG	Bürkner P. C. (2022). Bayesian Distributional Latent Variable Models. *Funder: German Research Foundation (DFG).* 238,000 €.
DFG	Bürkner P. C. & Bulling A. (2022). Amortized Bayesian Inference for Multilevel Models. *Funder: German Research Foundation (DFG).* 232,000 €.
SimTech	Guthke A. & Bürkner P. C. (2022). Data-Integrated Training of Surrogate Models for Uncertainty Quantification and Diagnostics of Complex Biological Systems. *Funder: Cluster of Excellence SimTech.* 285,000 €.
Cyber Valley	Bürkner P. C. (2021). Meta-Uncertainty in Bayesian Model Comparison. *Funder: Cyber Valley Research Fund.* 242,000 €.
SimTech	Bürkner P. C. & Sedlmair M. (2021). Machine Learning for Bayesian Model Building. *Funder: Cluster of Excellence SimTech.* 285,000 €.
SimTech	Bulling A. & Bürkner P. C. (2021). Bayesian Intent Prediction for Human-Machine Collaboration. *Funder: Cluster of Excellence SimTech.* 175,000 €.
ELLIS	Bulling A. Bürkner P. C., Kuchenbecker J. K., Pradel M., Schulte im Walde S., Staab S., Steinwart I., & Vu T. (2021). Stuttgart ELLIS Unit. *Funders: ELLIS Society and University of Stuttgart.*

OPEN-SOURCE SOFTWARE

brms	Lead author · An R package for Bayesian multilevel models using Stan. Received multiple awards (see the Awards section).
posterior	Lead author · An R package for working with posterior distributions.
thurstonianIRT	Lead author · An R Package for fitting Thurstonian IRT models.
posteriordb	Author · A Posterior Database for Bayesian Inference.
loo	Author · An R package for approximate leave-one-out cross-validation.
bayesian	Author · An Interface from brms to tidymodels.
rstan	Contributor · An R Interface to Stan.
bayesplot	Contributor · An R package for visualizing Bayesian models.
projpred	Contributor · An R package for projection predictive variable selection.
emmeans	Contributor · An R package for estimating marginal means.
Bayesflow	Contributor · A Python library for simulation-based Bayesian inference.

AWARDS

SIPS	2020 · Mission award of the Society for Improving Psychological Science (SIPS) for brms.
SIPS	2020 · Commendation award of the Society for Improving Psychological Science (SIPS) for brms.
University of Münster	2018 · Award for the best dissertation 2017-2018 in Psychology at the University of Münster.
German Society for Psychology	2017 · Gustav A. Lienert Award for the best methodological dissertation in Psychology awarded by the German Society for Psychology (DGPs).

University of Münster	2017 · Award for the best lecture at the Institute of Psychology in Münster.
German National Acad. Foundation	2014 · Scholarship of the German National Academic Foundation (Studienstiftung des deutschen Volkes).

SELECTED SCIENTIFIC INVOLVEMENT

Organizer	2022 · Organizer of the 1st International SimTech Summer School, University of Stuttgart. Co-Organizers: Benjamin Unger and Kristyna Pluhackova.
Reviewer	since 2022 · Reviewer for major funding agencies. Selection: German Research Foundation (DFG).
Faculty Member	since 2021 · Faculty Member of the International Max Planck Research School for Intelligent Systems (IMPRS-IS; https://imprs.is.mpg.de/).
Member	since 2021 · Member of Cyber-Valley (https://cyber-valley.de/en).
Member	since 2021 · Member of the ELLIS Society (https://ellis.eu/).
Founding Member	since 2021 · Founding member of the Stuttgart ELLIS Unit (https://ellis.eu/units/stuttgart).
Member	since 2018 · Member of the Stan Development Team (https://mc-stan.org/).
Consultant	since 2018 · Academic consultant in industry. Selection: Bayer (2018), Novartis (since 2021), Axem (since 2022).
Editor	2018 – 2020 · Associate editor of Biostatistics.
Reviewer	since 2014 · Reviewer for international journals and conferences. Selection: Bayesian Analysis, Behavior Research Methods, Biometrical Journal, Journal of Machine Learning Research, Journal of Probability and Statistics, Journal of Statistical Software, Journal of the Royal Statistical Society, Nature, Nature Human Behaviour, Philosophical Transactions, Psychological Methods, Psychometrika, Psychonomic Bulletin and Review, Statistics in Medicine.

SELECTED TALKS

DagStat Conference	2022 · Hamburg · Contributed Talk Title: *The sparse polynomial chaos expansion: a fully Bayesian approach with joint priors on the coefficients and global selection of terms.*
Psychoco Conference	2021 · online · Keynote Title: *Bayesian Item Response Models.*
Oslo UseR Group	2021 · online · Invited Talk Title: *Bayesian multilevel modeling with brms.*
Oxford University	2020 · online · Invited Talk Title: *Bayesian regression modeling.*
Turku University	2020 · online · Invited Talk Title: *Bayesian multilevel modeling with brms.*
University of Dortmund	2020 · online · Invited Talk Title: *Bayesian multilevel modeling with brms.*
Bayer	2020 · online · Invited Talk Title: *Bayesian multilevel modeling with brms.*
Stat. Methods for Linguistics	2019 · Potsdam · Keynote Title: *A Principled Bayesian Workflow for Data Analysis.*
University of Duisburg-Essen	2019 · Essen · Invited Talk Title: *A Principled Bayesian Workflow for Data Analysis.*
DGPs Conference	2019 · Kiel · Contributed Talk Title: *Improving Convergence Diagnostics for MCMC Sampling Algorithms.*

Stan Conference	2019 · Cambridge · Contributed Talk Title: *Leave-Future-Out Cross-Validation for Bayesian Time-Series Models.*
Multilevel Conference	2019 · Utrecht · Keynote Title: *Bayesian Multilevel Modeling with brms and Stan.*
DagStat	2019 · Munich · Contributed Talk Title: *Leave-Future-Out Cross-Validation for Bayesian Time-Series Models.*
Stan Conference	2018 · Helsinki · Contributed Talk Title: *Custom Response Distributions in brms.*
EAM Conference	2018 · Jena · Contributed Talk Title: *Handling Ordinal Predictors in Regression Models via Monotonic Effects.*
Bayes@Lund	2018 · Lund · Keynote Title: *Why Not to be Afraid of Priors.*
DGPs Conference	2017 · Tübingen · Keynote Title: *Optimal Design and Bayesian Data Analysis.*
eRum Conference	2016 · Poznan · Contributed Talk Title: *brms: An R Package for Bayesian Multilevel Models using Stan.*
Int. Workshop on Simulation	2015 · Vienna · Contributed Talk Title: *Adaptive Designs for Logistic Models with False Answers.*
DGPs Conference	2015 · Jena · Contributed Talk Title: *Optimal Design of Non-Parametric Two-Sample Tests.*

LECTURES

University of Stuttgart	2022 · Center for Simulation Science and Department of Computer Science Title: *Bayesian Statistics and Probabilisitic Machine Learning.* No evaluation available.
University of Stuttgart	2021 · Center for Simulation Science Title: *ML Sessions: Bayesian Statistics.* No evaluation available.
Aalto University	2019 · Department of Computer Science Title: *Bayesian Data Analysis.* No evaluation available. Contributed as TA.
University of Münster	2018-2019 · Department of Psychology Title: *Descriptive Statistics and Probability Theory.* Evaluation: 12.4 points (15 point *abitur* scale).
University of Münster	2018 · Department of Psychology Title: *Inferential Statistics.* Evaluation: 11.6 points (15 point *abitur* scale).
University of Münster	2017-2018 · Department of Psychology Title: *Descriptive Statistics and Probability Theory.* Evaluation: 12.5 points (15 point *abitur* scale).
University of Münster	2017 · Department of Psychology Title: *Inferential Statistics.* Evaluation: 11.8 points (15 point *abitur* scale).
University of Münster	2016-2017 · Department of Psychology Title: *Descriptive Statistics and Probability Theory.* Evaluation: 13.5 points (15 point *abitur* scale). Award for the best lecture in the winter semester 2016/2017.
University of Münster	2016 · Department of Psychology Title: *Inferential Statistics.* Evaluation: 12.8 points (15 point *abitur* scale).

University of Münster	2015-2016 · Department of Psychology Title: *Descriptive Statistics and Probability Theory.* Evaluation: 12.9 points (15 point *abitur* scale).
University of Münster	2015 · Department of Psychology Title: *Inferential Statistics.* Evaluation: 12.2 points (15 point *abitur* scale).
University of Münster	2014-2015 · Department of Psychology Title: *Descriptive Statistics and Probability Theory.* Evaluation: 11.9 points (15 point *abitur* scale).

SEMINARS

University of Stuttgart	2022 · Center for Simulation Science Title: *Novel Methods in Simulation Science.* No evaluation available.
University of Stuttgart	2021 · Center for Simulation Science Title: *Advanced Topics in Simulation Science.* No evaluation available.
University of Münster	2018 · Department of Psychology Title: *Advanced Statistics II: Structural Equation Modeling and Bayesian Statistics.* Evaluation: 10.9 points (15 point *abitur* scale).
University of Münster	2018 · Department of Psychology Title: *Advanced Statistics II: Structural Equation Modeling and Bayesian Statistics.* Evaluation: 10.8 points (15 point *abitur* scale).

SELECTED WORKSHOPS

University of Dortmund	2022 · Department of Statistics · 2 days Title: *Bayesian Statistics.*
University of Salzburg	2022 · Department of Psychology · 2 days Title: *Introduction to Bayesian Data Analysis.*
Oxford University	2021 · Department of Zoology · 4 days Title: *Bayesian Regression Modelling for Biologists.*
Research Cluster SMiP	2020 · Mannheim · 2 days Title: *Introduction to Stan: A Probabilistic Programming Language for Bayesian Inference.*
University of Aarhus	2020 · Department of Economics and Business Economics · 1 day Title: *Bayesian Model and Variable Selection.*
MPI for Human Development	2019 · Göttingen · 1 day Title: *Bayesian Multilevel Modeling.*
MPI for Emp. Aesthetics	2019 · Frankfurt · 2 days Title: *Bayesian Multilevel Modeling.*
Multilevel Conference	2019 · Utrecht · 1 day Title: *Introduction to Bayesian Data Analysis.*
DagStat Conference	2019 · Munich · 1 day Title: *Bayesian Data Analysis using Stan.*
University of Lausanne	2018 · Department of Psychology · 2 days Title: *Introduction to Meta-Analysis.*
University of Magdeburg	2018 · Department of Psychology · 4 days Title: *Introducing Basic and Advanced Bayesian Modelling.*

University of Aarhus	2018 · 4 days Title: *Advanced Bayesian Statistical Modeling.*
ETH Zurich	2018 · 1 day Title: *Classical and Bayesian Multi-Level Models in R.*
University of Hamburg	2017 · Department of Psychology · 2 days Title: *Fitting Multi-Level Models in R.*
DPPD Conference	2017 · Munich · 1 day Title: *Bayesian Multi-Level Models in R with brms.*
University of Bern	2017 · Department of Psychology · 3 days Title: *Bayesian Multi-Level Models in R with brms.*
University of Münster	2017 · Department of Psychology · 3 days Title: *Introduction to Bayesian Inference.*
University Paris Decardes	2017 · 1 day Title: *Introduction to Meta-Analysis.*
DGPs Conference	2016 · Leipzig · 1 day Title: *Bayesian Multilevel Models in R using the Package brms.*

CURRENT PHD STUDENTS

University of Stuttgart	since 2022 · Florence Bockting Topic: *Simulation-Based Prior Distributions for Bayesian models.*
University of Stuttgart	since 2022 · Luna Fazio Topic: *Bayesian Distributional Latent Variable Models.*
University of Stuttgart	since 2022 · Soham Mukherjee Topic: *Probabilistic Models of Single-Cell Data.* Co-Advisor: Prof. Manfred Claassen
University of Stuttgart	since 2022 · Philipp Reiser · Computer Science Topic: *In Silico Models of Coupled Biological Systems.* Co-Advisor: Dr. Anneli Guthke
University of Stuttgart	since 2021 · Maximilian Scholz · Computer Science Topic: *Machine Learning for Bayesian Model Builing.*
University of Stuttgart	since 2021 · Javier Aguilar · Computer Science Topic: *Intuitve Joint Priors for Bayesian Multilevel Models.*
University of Stuttgart	since 2021 · Marvin Schmitt · Computer Science Topic: *Meta-Uncertainty in Bayesian Model Comparison.*
Aalto University	since 2021 · Noa Kallioinen · Computer Science Topic: *Sensitivity Diagnostics in a Bayesian Workflow.* Primary Advisor: Prof. Aki Vehtari
Aalto University	since 2020 · Teemu Säilynoja · Computer Science Topic: *Convergence and Goodness-of-Fit Diagnostics in a Bayesian Workflow.* Primary Advisor: Prof. Aki Vehtari
Aalto University	since 2019 · Alejandro Catalania · Computer Science Topic: *Robust Bayesian Methods for Model and Variable Selection.* Primary Advisor: Prof. Aki Vehtari

GRADUATED PHD STUDENTS

University of Münster	2018 – 2021 · Niklas Schulte · Psychology Topic: *Statistical Properties of Forced-Choice Questionnaires in Applicant Personality Measurements.* Primary Advisor: Prof. Heinz Holling

CURRENT POSTDOCTORAL RESEARCHERS

University of
Stuttgart

since 2022 · Lei Shi
Topic: *Bayesian Intent Prediction for Human-Machine Collaboration.*
Co-Advisor: Prof. Andreas Bulling

KEY PUBLICATIONS

2022

Bürkner P. C. (2022). On the information obtainable from comparative judgments. *Psychometrika.* doi:10.1007/s11336-022-09843-z

Catalina A., Bürkner P. C., & Vehtari A. (2022). Projection Predictive Inference for Generalized Linear and Additive Multilevel Models. *Artificial Intelligence and Statistics (AISTATS) Conference Proceedings.*

2021

Vehtari A., Gelman A., Simpson D., Carpenter B., & Bürkner P. C. (2021). Rank-normalization, folding, and localization: An improved Rhat for assessing convergence of MCMC (with discussion). *Bayesian Analysis.* 16(2), 667–718. doi:10.1214/20-BA1221

Radev S., D'Alessandro M., Mertens U. K., Voss A., Köthe U., & Bürkner P. C. (2021). Amortized Bayesian Model Comparison with Evidental Deep Learning. *IEEE Transactions on Neural Networks and Learning Systems.* doi:10.1109/TNNLS.2021.3124052

Paananen T., Piironen, J., Bürkner P. C., & Vehtari A. (2021). Implicitly Adaptive Importance Sampling. *Statistics and Computing.* 31(2), 1–19. doi:10.1007/s11222-020-09982-2

2020

Bürkner P. C., Gabry J., & Vehtari A. (2020). Approximate leave-future-out cross-validation for time series models. *Journal of Statistical Computation and Simulation.* 90(14), 2499–2523. doi:10.1080/00949655.2020.1783262

Bürkner P. C., & Charpentier, E. (2020). Modeling Monotonic Effects of Ordinal Predictors in Regression Models. *British Journal of Mathematical and Statistical Psychology.* 73(3), 420–451. doi:10.1111/bmsp.12195

2018

Bürkner P. C. (2018). Advanced Bayesian Multilevel Modeling with the R Package brms. *The R Journal.* 10(1), 395–411. doi:10.32614/RJ-2018-017

2017

Bürkner P. C. (2017). brms: An R Package for Bayesian Multilevel Models using Stan. *Journal of Statistical Software.* 80(1), 1–28. doi:10.18637/jss.v080.i01

2016

Bürkner P. C., Doebler P., & Holling H. (2016). Optimal design of the Wilcoxon-Mann-Whitney-test. *Biometrical Journal.* 59(1), 25–40. doi:10.1002/bimj.201600022

FURTHER PUBLICATIONS

2022

Säilynoja, T., Bürkner P. C., & Vehtari A. (2022). Graphical Test for Discrete Uniformity and its Applications in Goodness of Fit Evaluation and Multiple Sample Comparison. *Statistics and Computing.*

Pavone, F., Piironen, J., Bürkner P. C., & Vehtari A. (2022). Using reference models in variable selection. *Computational Statistics.*

Schad D. J., Nicenboim B., Bürkner P. C., Betancourt M., & Vasishth S. (2022). Workflow Techniques for the Robust Use of Bayes Factors. *Psychological Methods.*

Heck, D., Boehm, U., Böing-Messing, F., Bürkner P. C., ..., Hoijtink, H. (2022). A Review of Applications of the Bayes Factor in Psychological Research. *Psychological Methods.*

Malén T., Karjalainen T., Isojärvi J., Vehtari A., Bürkner P. C., ..., & Nummenmaa L. (2022). Age and sex dependent variability of type 2 dopamine receptors in the human brain: A large-scale PET cohort. *NeuroImage.*

Franke, L. K., Miedl, S. F., Danböck, S. K., Lohse, J., Liedlgruber, M., Bürkner P. C., Pletzer B., & Wilhelm, F. H. (2022). Estradiol during (analogue-)trauma: risk- or protective factor for intrusive re-experiencing? *Psychoneuroendocrinology.* doi:10.1016/j.psyneuen.2022.105819

Jordon M., Smith P., Long P., Bürkner P. C., Petrokofsky G. & Willis K. (2022). Can Regenerative Agriculture increase national soil carbon stocks? Simulated country-scale adoption of reduced tillage, cover cropping, and ley-arable integration using RothC-26.3. *Science of the Total Environment.*

Jordon M., Willis K., Bürkner P. C., & Petrokofsky G. (2022). Rotational grazing and multispecies herbal leys increase productivity in temperate pastoral systems – a meta-analysis. *Agriculture, Ecosystems & Environment.*

Jordon M., Willis K., Bürkner P. C., Haddaway N., Smith P., & Petrokofsky G. (2022). Temperate Regenerative Agriculture; a win-win for soil carbon and crop yield? *Environmental Research Letters.*

Nohe C., Hüffmeier J., Bürkner P. C., Mazei J., Sondern D., Runte A., Sieber F., & Hertel G. (2022). Unethical Choice in Negotiations: A Meta-Analysis on Gender Differences and Their Moderators. *Organizational Behavior and Human Decision Processes.*

Teetzen, F., Bürkner P. C., Gregersen, S., & Vincent-Höper, S. (2022). The Mediating Effects of Work Characteristics on the Relationship between Transformational Leadership and Employee Well-Being: A Meta-Analytic Investigation. *Journal of Environmental Research and Public Health.* doi:10.3390/ijerph19053133

2021   Bürkner P. C. (2021). Bayesian Item Response Modelling in R with brms and Stan. *Journal of Statistical Software.* 100(5). 1–54. doi:10.18637/jss.v100.i05

Driebe, J. C., Sidari, M., Dufner, M., von der Heiden, J. M., Bürkner P. C., Penke, L., Zietsch B. P., & Arslan, R. C. (2021). Intelligence can be detected but is not found attractive in videos and live interactions. *Evoluation and Human Behavior.*

Kołczyńska M. & Bürkner P. C. (2021). Marketplace of indicators: Inconsistencies between country trends of measures of governance. *Political Research Exchange.*

Modrák M., Bürkner P. C., Sieger T., ..., Leos-Barajas V., Fiser K., & Hyanek T. (2021). Detailed disease progression of 213 patients hospitalized with Covid-19 in the Czech Republic: An exploratory analysis. *PLOS ONE.*

Franke, L. K., Rattel, J. A., Miedl, S. F., Danböck, S. K., Bürkner, P. C., & Wilhelm, F. H. (2021). Intrusive memories as conditioned responses to trauma cues: an empirically supported concept? *Behavior Research and Therapy.*

Dietel F., Möllmann A., Bürkner P. C., Wilhelm S., & Buhlmann U. (2021) Interpretation bias across body dysmorphic, social anxiety and generalized anxiety disorder – a multilevel, diffusion model account. *Cognitive Therapy and Research.*

Stecker, J., Bürkner P. C., Hellmann, J., Nestler, S., & Back, M. (2021). Prejudice at First Sight? First Impressions of Refugees are More Strongly Influenced by Targets' and Perceivers' Individual Characteristics Than by Sheer Group Affiliation. *Collabora: Psychology.*

Reynolds, J. & Bürkner P. C. (2021). Examining the Relationship Between Weapon Type and Relationship Type in American Homicides: A Bayesian Approach. *Homicide Studies.*

Kuck, N., Cafitz, L., Bürkner, P. C., Nosthoff-Horstmann, L., Wilhelm, S., & Buhlmann, U. (2021). Body dysmorphic disorder and self-esteem: A meta-analysis. *BMC Psychiatry.*

Hoppen L. M., Kuck N., Bürkner P. C., Karin E., Wootton B. M., & Buhlmann, U. (2021). Low intensity technology-delivered cognitive behavioral therapy for obsessive-compulsive disorder: A meta-analysis. *BMC Psychiatry.*

Winter, B. & Bürkner P. C. (2021). Poisson regression for linguists: A tutorial introduction to modeling count data with brms. *Language and Linguistics Compass.* doi:10.1111/lnc3.12439

2020   Bürkner P. C., Gabry J., & Vehtari A. (2020). Efficient leave-one-out cross-validation for Bayesian non-factorized normal and Student-t models. *Computational Statistics.*

Bürkner P. C. (2020). Analysing Standard Progressive Matrics (SPM-LS) with Bayesian Item Response Models. *Journal of Intelligence.* 8(1), 1–18. doi:10.3390/jintelligence8010005

Hartmann M., Agiashvili G., Bürkner P. C., & Klami A. (2020). Flexible Prior Elicitation via the Prior Predictive Distribution. *Uncertainty in Artificial Intelligence (UAI) Conference Proceedings.*

Radev S., Wieschen E. M., Voss A., & Bürkner P. C., (2020). Amortized Bayesian Inference for Models of Cognition. *International Conference on Cognitive Modelling (ICCM) Conference Proceedings.*

Schulte N., Holling H., & Bürkner P. C. (2020). Can High-Dimensional Questionnaires Resolve the Ipsativity Issue of Forced-Choice Response Formats? *Educational and Psychological Measurement.*

Gelman A., Vehtari A., Simpson D., Margossian, C. C., Carpenter, B., Yao, Y., Kennedy L., Gabry J., Bürkner P. C., & Modrák M. (2020). Bayesian Workflow. *ArXiv preprint.*

Paananen T., Catalina A., Bürkner P. C., & Vehtari A. (2020). Group Heterogeneity Assessment for Multilevel Models. *ArXiv preprint.*

Trempler, I., Bürkner P. C., El-Sourani N., Binder E., Reker P., Fink G. R., & Schubotz R. (2020). Impaired context-sensitive adjustment of behaviour in Parkinson's disease patients tested on and off medication: an fMRI study. *NeuroImage.* 212. 1–11. doi:10.1016/j.neuroimage.2020.116674

Landmeyer N. C., Bürkner P. C., Wiendl H., Ruck T., Hartung H. P., Holling H., Meuth S. G., & Johnen A. (2020). Disease-modifying treatments and cognition in relapsing-remitting multiple sclerosis: A meta-analysis. Neurology. doi:10.1212/WNL.0000000000009522

Dietel F., Zache C., Bürkner P. C., Schulte J., Möbius M., Bischof A., Wilhelm S., & Buhlmann U. (2020). Internet-based Interpretation Bias Modification for body dissatisfaction: A three-armed randomized controlled trial. *International Journal of Eating Disorders.* doi:10.1002/eat.23280

Deres T., Bürkner P. C., Klauke B., & Buhlmann U. (2020). The Role of Stigma during the Course of Inpatient Psychotherapeutic Treatment in a German Sample. *Clinical Psychology and Psychotherapy.* doi:doi:10.1002/cpp.2423

Busch, L., Utesch, T., Bürkner P. C., & Strauss, B. (2020). A Daily Diary of the Quantified Self – The Influence of Fitness App Usage on Psychological Well-Being, Body Listening and Body Trusting. *Journal of Sport & Exercise Psychology.* doi:10.1123/jsep.2019-0315

Williams D. R. & Bürkner P. C. (2020). Coding errors lead to unsupported conclusions: A critique of Hofmann et al. (2015). *Meta-Psychology.*

Hossiep R., Harnack, K., & Bürkner P. C. (2020). Goal setting in distributive and integrative negotiations: a meta-analysis. *PsyArXiv preprint.*

2019 Bürkner P. C., Schulte N., & Holling H. (2019). On the Statistical and Practical Limitations of Thurstonian IRT Models. *Educational and Psychological Measurement.* 79(5), 827–854. doi:10.1177/0013164419832063

Bürkner P. C., & Vuorre, M. (2019). Ordinal Regression Models in Psychology: A Tutorial. *Advances in Methods and Practices in Psychological Science.* 2(1), 77–101. doi:10.1177/2515245918823199

Bürkner P. C. (2019). thurstonianIRT: Thurstonian IRT Models in R. *Journal of Open Source Software.* doi:10.21105/joss.01662

Chen G., Bürkner P. C., Taylor P. A., Li Z., Yin L., Glen D. R., Kinnison J. K., Cox R. W., & Pessoa L. (2019). One Model to Rule Them All: An Integrative Approach to Matrix-Based Analyses in Neuroimaging Connectomics. *Human Brain Mapping.* 1–19. doi:10.1002/hbm.24686.

Nalborczyk L., Batailler C., Loevenbruck H., Vilain A., & Bürkner P. C. (2019). An Introduction to Bayesian Multilevel Models using brms: A case study of gender effects on vowel variability in Standard Indonesian. *Journal of Speech, Language, and Hearing Research.* doi:10.1044/2018_JSLHR-S-18-0006

Zetsche, U., Bürkner P. C., & Renneberg, B. (2019). Future expectations in clinical depression: biased or realistic? *Journal of Abnormal Psychology.* 128(7), 678–688. doi:10.1037/abn0000452

Nalborczyk, L., Bürkner P. C., & Williams D. (2019). Pragmatism should not be a substitute for statistical literacy, a commentary on Albers, Kiers, and van Ravenzwaaij (2019). *Collabora: Psychology.* 5(1), 1–5. doi:10.1525/collabra.197

Beisemann M., Forthmann B., Bürkner P. C., & Holling H. (2019). Validation of an Alternate Scoring for the Remote Associates Test. *The Journal of Creative Behavior.* 1–16. doi:10.1002/jocb.394

Forthmann, B., Bürkner P. C., Benedek, M., Szardenings, C., & Holling, H. (2019). A New Perspective on the Multidimensionality of Divergent Thinking Tasks. *Frontiers in Psychology: Cognition.* 10, 1–9. doi:10.3389/fpsyg.2019.00985

Schuler, B. A., Binnewies, C., & Bürkner P. C. (2019). The Relationship Between Job Crafting, Work Engagement, and Performance: A Meta-Analysis. *PsyArXiv preprint.*

2018 Bürkner P. C., Schwabe R., & Holling H. (2018). Optimal Designs for the Generalized Partial Credit Model. *British Journal of Mathematical and Statistical Psychology.* 72(2), 1–23. doi:10.1111/bmsp.12148

Johnen A., Bürkner P. C., Landmeyer N. C., ..., Salmen A. (2018). Can we predict cognitive decline after initial diagnosis of multiple sclerosis? – Results from the German National early MS cohort (KKNMS). *Journal of Neurology*. 1–12. doi:10.1007/s00415-018-9142-y

Quante L., Kluger S., Bürkner P. C., Ekman M., & Schubotz R. (2018). Graph measures in task-based fMRI: functional integration during read-out of visual and auditory information. *PLOS ONE*. 13(11), 1–18. doi:10.1371/journal.pone.0207119

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