

Johnny van Doorn

Amsterdam
✉ j.b.vandoorn@uva.nl



Education

- 2021–current **Assistant Professor**, *The University of Amsterdam*
- 2015–2020 **Graduate Student**, *The University of Amsterdam*, Supervisors: Prof. Eric-Jan Wagenmakers, Dr. Maarten Marsman, and Dr. Alexander Ly
Dissertation – Bayesian Rank-Based Inference
- 2013–2015 **Masters of Psychology, Theory & Research**, *KU Leuven*
Magna Cum Laude
- 2011–2013 **Bachelor of Psychology, Theory & Research**, *KU Leuven*
Cum Laude
- 2007–2010 **Bachelor of Social Sciences**, *University College Roosevelt/Utrecht University*
Honors

Journal Publications

- 2022 **van Doorn, J.B.**, Haaf, J.M., Stefan, A.M., Wagenmakers, E.-J., Cox, G.E., Davis-Stober, . . . , Aust, F. Bayes Factors for Mixed Models: A Discussion. *Computational Brain & Behavior*.
- 2022 **van Doorn, J.B.**, Aust, F., Haaf, J.M., Stefan, A., & Wagenmakers, E.-J. Bayes Factors for Mixed Models: Perspective on Responses. *Computational Brain & Behavior*.
- 2022 Temp, A.G., Ly, A., **van Doorn, J.B.**, Wagenmakers, E.-J., Tang, Y., Lutz, M. W., & Teipel, S. A Bayesian perspective on Biogen's aducanumab trial. *Alzheimer's & Dementia*.
- 2021 **van Doorn, J.B.**, Aust, F., Haaf, J.M., Stefan, A., & Wagenmakers, E.-J. Bayes Factors for Mixed Models. *Computational Brain & Behavior*.
- 2021 **van Doorn, J.B.**, Westfall, H., & Lee, M.D. Using the Weighted Kendall's Distance to Analyze Psychological Data and Models. *The Quantitative Methods for Psychology*, 17, 154-165.

- 2021 **van Doorn, J.B.**, van den Bergh, D., Dablander, F., Derks, K., van Dongen, N.N.N., Evans, N. J., Gronau, Q. F., Haaf, J.M., Kunisato, Y., Ly, A., Marsman, M., Sarafoglou, A., Stefan, A., & Wagenmakers, E.-J. Strong Public Claims May Not Reflect Researchers' Private Convictions. *Significance*, 18, 44-45.
- 2021 Scheepstra, K.W.F., **van Doorn, J.B.**, Scheepens, D.S., de Haan, A., Schukking, N., Zantvoord, J.B., & Lok, A. Rapid speed of response to ECT treatment in bipolar depression: A retrospective chart review. *Journal of Psychiatric Research*, 147, 34-38.
- 2021 Balazs Aczel, Barnabas Szaszi, Gustav Nilsson, Olmo R Van Den Akker, Casper J Albers, Marcel Alm Van Assen, Jojanneke A Bastiaansen, Daniel Benjamin, . . . , **van Doorn, J.B.**, . . . , & Wagenmakers, E.-J. Consensus-based guidance for conducting and reporting multi-analyst studies. *Elife*, 10, e72185.
- 2021 **van Doorn, J.B.**, van den Bergh, D., Boehm, U., Dablander, F., Derks, K., Draws, T., Evans, N. J., Gronau, Q. F., Hinne, M., Kucharsky, S., Ly, A., Marsman, M., Matzke, D., Komarlu Narendra Gupta, A. R., Sarafoglou, A., Stefan, A., Voelkel, J. G., & Wagenmakers, E.-J. The JASP Guidelines for Conducting and Reporting a Bayesian Analysis. *Psychonomic Bulletin & Review*, 28, 813-826
- 2020 **van Doorn, J.B.**, Ly, A., Marsman, M., & Wagenmakers, E.-J. Bayesian Rank-Based Hypothesis Testing for the Rank Sum Test, the Signed Rank Test, and Spearman's ρ . *Journal of Applied Statistics*, 47, 2984-3006.
- 2020 **van Doorn, J.B.**, Matzke, D., & Wagenmakers, E.-J. (2020). An in-class demonstration of Bayesian inference. *Psychology Learning and Teaching*, 19, 36-45.
- 2020 Ly, A., Stefan, A., **van Doorn, J.B.**, Dablander, F., van den Bergh, D., Sarafoglou, A., Kucharsky, S., Derks, K., Gronau, Q. F., Raj, A., Boehm, U., van Kesteren, E.-J., Hinne, M., Matzke, D., Marsman, M., & Wagenmakers, E.-J. The Bayesian methodology of Sir Harold Jeffreys as a practical alternative to the p-value hypothesis test. *Computational Brain & Behavior*, 3, 153-161.
- 2020 van den Bergh, D., **van Doorn, J.B.**, Marsman, M., Draws, T., van Kesteren, E.-J., Derks, K., Dablander, F., Gronau, Q. F., Kucharsky, S., Komarlu Narendra Gupta, A. R., Sarafoglou, A., Voelkel, J. G., Stefan, A., Ly, A., Hinne, M., Matzke, D., & Wagenmakers, E.-J. (in press). A tutorial on conducting and interpreting a Bayesian ANOVA in JASP. *L'Annee Psychologique/Topics in Cognitive Psychology*.
- 2019 **van Doorn, J.B.**, Ly, A., Marsman, M., & Wagenmakers, E.-J. (2019). Bayesian Estimation of Kendall's tau Using a Latent Normal Approach. *Statistics and Probability Letters*, 145, 268-272.
- 2019 van Dongen, N. N. N., **van Doorn, J. B.**, Gronau, Q. F., van Ravenzwaaij, D., Hoekstra, R., Haucke, M. N., Lakens, D., Hennig, C., Morey, R. D., Homer, S., Gelman, A., Sprenger, J., & Wagenmakers, E.-J. (2019). Multiple perspectives on inference for two simple statistical scenarios. *The American Statistician*, 73, 328-339.

- 2019 Crüwell, S., **van Doorn, J.B.**, Etz, A., Makel, M.C., Moshontz, H., Niebaum, J., Orben, A., Parsons, S. and Schulte-Mecklenbeck, M. (in press). 7 Easy Steps to Open Science: An Annotated Reading List. *Zeitschrift für Psychologie*.
- 2018 **van Doorn, J.B.**, Ly, A., Marsman, M., & Wagenmakers, E.-J. (2018). Bayesian Inference for Kendall's Rank Correlation Coefficient. *The American Statistician*, 72, 303-308.
- 2018 Jepma, M., Koban, L., **van Doorn, J.B.**, Jones, M., & Wager, T. D. (2018). Behavioural and neural evidence for self-reinforcing expectancy effects on pain. *Nature Human Behaviour*, 2, 838-855.
- 2018 Wagenmakers, E.-J., Love, J., Marsman, M., Jamil, T., Ly, A., Verhagen, A. J., Selker, R., Gronau, Q. F., Dropmann, D., Boutin, B., Meerhoff, F., Knight, P., Raj, A., van Kesteren, E.-J., **van Doorn, J.B.**, Smira, M., Epskamp, S., Etz, A., Matzke, D., de Jong, T., van den Bergh, D., Sarafoglou, A., Steingroever, H., Derks, K., Rouder, J. N., & Morey, R. D. (2018). Bayesian inference for psychology. Part II: Example applications with JASP. *Psychonomic Bulletin & Review*, 25, 58-76.
- 2018 Derks, K., Burger, J., **van Doorn, J.B.**, Kossakowski, J. J., Matzke, D., . . . , & Wagenmakers, E.-J. (2018). Network models to organize a dispersed literature: The case of misunderstanding analysis of covariance. *Journal of European Psychology Students*, 9, 48-57.
- 2015 Open Science Collaboration (2015). Estimating the reproducibility of psychological science. *Science*, 349.

Teaching

Courses

- 2019-current **Research Methods & Statistics (12 EC)**, UNIVERSITY OF AMSTERDAM
Introductory statistics course for first year Psychology Bachelor's students.
- 2023-current **Scientific and Statistical Reasoning (9 EC)**, UNIVERSITY OF AMSTERDAM
Intermediate statistics course for second year Psychology Bachelor's students.
- 2021-current **Basic Skills in Mathematics, Programming & Statistics (6 EC)**, UNIVERSITY OF AMSTERDAM
Specialization course for second year Psychological Methods Bachelor's students.
- 2021-2023 **Statistiek voor de Levenswetenschappen(6 EC)**, UNIVERSITY OF AMSTERDAM
Introductory course in statistics for second year Bèta-Gamma Bachelor's students.
- 2017-2020 **Programming in Psychological Science (6 EC)**, UNIVERSITY OF AMSTERDAM
High intensity programming course in R, part of the Psychology Research Master's program.
- 2018 **Business Seminar and Professional Skills: Advanced Statistics with R (2 EC)**, UNIVERSITY OF AMSTERDAM
Three day programming course in R, part of the Business Administration Master's program.

2012–2014 **Statistics tutor**, LOGOS, Leuven

Individual and group-level statistics tutoring sessions for bachelor's and master's students of psychology, medicine, and humanities.

Workshops

Bayesian Inference in JASP, VARIOUS

Introductory workshops in Bayesian hypothesis testing and estimation using the statistics software JASP:

- April 2023 Full-day workshop for the TeaP society, held online
- March 2023 Full-day workshop for the TeaP Conference held in Trier, Germany
- January 2023 Full-day workshop for the TeaP society, held online
- August 2022 Full-day workshop for the European Conference on Visual Perception held in Nijmegen, the Netherlands
- May 2022 Half-day workshop for Hogrefe Publishers held in Amsterdam, the Netherlands
- June 2019 Half-day workshop for Interlearn/Oefenweb held in Amsterdam, the Netherlands
- June 2019 Webinar for the Society for Personality and Social Psychology - with Alexander Etz and Julia Haaf
- April 2019 Three day Stan workshop for Leuven University, held in Leuven, Belgium- with Don van den Bergh and Fabian Dablander
- Feb 2019 Half-day workshop for the Society for Personality and Social Psychology Conference, held in Portland, USA - with Alexander Etz and Quentin Gronau
- July 2018 Half-day workshop for the Society for the Improvement of Psychological Science, held in Grand Rapids, USA
- March 2018 Two day workshop for the Adam Mickiewicz University in, held in Poznan, Poland - with Quentin Gronau
- Dec 2017 Two day workshop for the Postgraduate School for Experimental Psychopathology, held in Heeze, the Netherlands - with Quentin Gronau and Noah van Dongen

Experience, Expertise, and Service

Presentations

- 2019 **Rank-Based Bayesian Inference**, IMPS, New York City, USA
- 2018 **Rank-Based Bayesian Inference**, APS ANNUAL CONVENTION, Invited talk, Boston, USA
- 2018 **Rank-Based Bayesian Inference**, IOPS SUMMER CONFERENCE, Amsterdam, the Netherlands
- 2017 **Rank-Based Bayesian Hypothesis Testing Through Data Augmentation**, ANNUAL MEETING OF THE SOCIETY FOR MATHEMATICAL PSYCHOLOGY, Warwick, United Kingdom

Organization

Annual Workshop - JAGS and WinBUGS Workshop: Bayesian Modeling for Cognitive Science, Amsterdam

Part of the organizing committee

- 2019 August 26-30, in Amsterdam, the Netherlands (37 participants)
- 2018 August 20-24, in Amsterdam, the Netherlands (66 participants)
- 2017 August 21-25, in Amsterdam, the Netherlands (40 participants)
- 2016 August 15-19, in Amsterdam, the Netherlands (65 participants)

Annual Workshop - Theory and Practice of Bayesian Hypothesis Testing, Amsterdam

Part of the organizing committee

- 2019 August 22-23, in Amsterdam, the Netherlands (30 participants)
- 2018 August 27-28, in Amsterdam, the Netherlands (50 participants)
- 2017 August 28-29, in Amsterdam, the Netherlands (50 participants)
- 2016 August 22-23, in Amsterdam, the Netherlands (70 participants)

2019 PMLabs, Amsterdam

Lab meeting for the whole department of Psychological Methods, where all staff members show each other, and the students, what they are working on.

Supervision

- 2022 **Timo van Ommeren**, *Bachelor Thesis*
Profiling attitudes towards drug legalisation
- 2022 **Jessica Bormann**, *Behavioral Data Science Master's Internship*
Grad-Cam: A feature visualisation technique for Convolutional Neural Network models
- 2022 **Kika Banning**, *Behavioral Data Science Master's Internship*
AnalitiQs: Yearly eNPS research
- 2021 **Mats Stijlaart**, *Behavioral Data Science Master's Internship/Thesis*
Estimating the average treatment effect of online visibility on sales performance of a green energy supplier
- 2019 **Jill de Ron**, *Behavioral Data Science Master's Internship*
JASK - Just Ask JASP: A platform designed to help students and practitioners better understand statistics
- 2019 **Myrthe Veenman**, *Behavioral Data Science Master's Internship*
JASK - Just Ask JASP: A platform designed to help students and practitioners better understand statistics
- 2019 **Alexandra Rusu**, *Behavioral Data Science Master's Internship*
Needs-assessment for statistical education at high school level
- 2018 **Koen Derks**, *Psychology Research Master's thesis*
A Bayesian Assumption Check for Normality
- 2018 **Wessel van der Ham**, *Psychobiology Bachelor's thesis*, literature study
The Choice Between Frequentism and Bayesianism

- 2017 **Julius Stok**, *Psychobiology Bachelor's thesis*, literature study
The frequentist method vs the Bayesian paradigm: a brief overview of the debate

Programming

- 2016-current **JASP Team Member**, <https://jasp-stats.org/>
JASP is an open-source statistics software that aims to increase the accessibility, transparency, and intuitiveness of conducting statistical analyses. My work has focused on adding features to the ANOVA, regression, and *t*-test.

Awards and Honours

- 2018 IOPS Best Presentation Award
2017 MathPsych Travel Award
2015 NWO/IOPS Graduate Program Grant

Programming Skills

- Basic C++
Intermediate Python
Advanced R, Stan, JAGS, \LaTeX , Markdown, JASP

Reviewing

Nature Human Behavior
Psychological Methods
Behavior Research Methods
Psychonomic Bulletin & Review
Royal Society Open Science
Journal of Computer-Assisted Learning
Psychology Learning & Teaching
Food Quality and Preference

Miscellaneous

- 2022 **JASP Foundation**, JASP/University of Amsterdam
In collaboration with E-J Wagenmakers, Han van der Maas, and IXA, setting up a non-profit foundation around the open-source statistics software JASP. The goal of the foundation is to ensure the longevity of the software, and to aid universities in moving towards using open software and materials.

- 2022 **Study Advisor**, University of Amsterdam
Active study advisor for the Psychological Methods group, for Bachelor and Master students. Monitoring students' well-being, organizing information sessions, and advising on electives/study direction.
- 2022 **Curriculum Coordinator Psychological Methods**, University of Amsterdam
Part of the committee that revises the educational targets of the Psychology bachelor's program (in Dutch: "Project Zichtbare Leerlijnen").
- 2019 **Research visit**, University of California, Irvine, USA
From February 10th to March 9th, visited the labs of prof. Michael Lee and prof. Jeff Rouder. The visit was spent working on an extension to the rank correlation measure Kendall's τ and developing Bayesian rank-based methods for ANOVA designs.
- 2019 **PhD Representative**, *Department of Psychological Methods*, University of Amsterdam
Duties include organizing lab meetings, offering counseling to junior researchers, and being a spokesperson at policy meetings.
- 2019 **Member of the Bachelor's Program Reform Committee**, *Department of Psychological Methods*, University of Amsterdam
Together with eight colleagues, we are working on a reform of the Psychological Methods Bachelor program, in order to accommodate structural changes imposed by the Faculty of Psychology.
- 2016 **Participation in the Summer School in Computational Modeling**, Dobbiaco, Italy
This summer school is dedicated to introducing researchers to the basic techniques of computational and mathematical modelling from the ground up and in a hands-on manner.
- 2015 **Participation in the European Seminar on Quantitative Psychology**, Balatonfoldvar, Hungary
In an intensive program, students are educated on different branches within mathematical psychology. The program aims at international knowledge exchange and collaboration with European peers.
- 2014 **Participation in the European Seminar on Quantitative Psychology**, Sagadi, Estonia
Similar to the seminar in 2015.
- 2010 **Chair of the Philosophy Committee**, University College Roosevelt
For a period of one year, I organized weekly discussion events which encompassed a wide range of philosophical topics