# Dr. Frederik Aust

Department Psychology, University of Cologne, Herbert-Lewin-Str. 2, 50931 Köln, Germany

Professional experience University of Cologne 9/2023-present Research Methods and Experimental Psychology Cologne, DE AKADEMISCHER RAT (EQUIV. ASSISTANT PROFESSOR/LECTURER) University of Amsterdam 9/2020-8/2023 Psychological Methods Amsterdam, NL POSTDOCTORAL RESEARCHER • Topic: Bayesian hypothesis testing and cognitive modeling University of Missouri 1-2/2017Perception and Cognition Lab Columbia, MO VISITING RESEARCHER • Topic: Ordinal constraints in Bayesian hypothesis testing Leibniz Research Centre for Working Environment and Human Factors 7/2012-11/2013 Dortmund. DE Perceptual Cybernetics RESEARCH ASSOCIATE Education Ph.D. in Psychology (summa cum laude) 12/2013-1/2021 University of Cologne Cologne, DE • Advisor: Dr. Christoph Stahl • Title: "Exemplars as least-committed alternative to dual representations in learning and memory" Diploma in Psychology (1.0) 10/2006-3/2012 HEINRICH-HEINE-UNIVERSITY Düsseldorf, DE • Advisor: Dr. Jochen Musch Competitive grants 2022 Amsterdam Brain and Cognition Talent Grant for Informative and efficient Bayesian hypothesis tests for lesion studies; Principle investigators Drs. Eric-Jan Wagenmakers 125.000€ and Edward de Haan Honors and awards Ig Nobel Prize from Annals of Improbable Research at the Massachusetts Institute of 2024 Technology, MA, USA, for the article "Fair coins tend to land on the same side they started: Evidence from 350,757 flips" (Bartoš et al., 2023) Best Seminar, MSc. Psychology at the Department of Psychology, University of Cologne 2024 in 2024 for the seminar "Seminar Multivariate Statistics"

2024

Best Seminar, BSc. Psychology at the Department of Psychology, University of Cologne

in 2024 for the seminar "Seminar Statistics 2" with Simone Malejka and Philine

Thomasius

Pineapple Science Award from Zhejiang Science and Technology Museum, Hangzhou, China, for the article "Fair coins tend to land on the same side they started: Evidence from 350,757 flips" (Bartoš et al., 2023)	2023
Society for the Improvement of Psychological Science (SIPS) Mission Award for tenzing	2023
1. Prize in the 13th Dissertation Competition of the German Society for Psychology (DGPs) section General and Cognitive Psychology	2023
Society for the Improvement of Psychological Science (SIPS) Mission Award for the R package papaja	2 <b>0</b> 19 \$500
Center for Open Science (COS) Preregistration Challenge Award for Aust, Haaf, & Stahl (2018)	2018 \$1.000
University of Cologne Graduate School travel awards (3)	2015–2017 3.278€
German Society for Psychology's (DGPs) section Methods and Evaluation travel award	2014 381€
Ruhr-University Bochum Graduate School travel award	2014 1.300€

# Service and professional activities

#### **MEMBERSHIP**

- Society for Mathematical Psychology
- Psychological Science Accelerator

### CONSULTING

CONSULTING	
Member of the JASP team	11/2021-present
DEPARTMENTAL AND UNIVERSITY SERVICES	
Member of W3 Social Psychology chair appointments committee at the University of Cologne Psychology Department	2–7/2017
Together with Christoph Stahl, Christian Unkelbach, and Jan Crusius founded the Open Science Working Group at Psychology Department of the University of Cologne	2/2017-8/2021
Together with Tobias Heycke organized the doctoral student colloquium at the Psychology Department of the University of Cologne	3/2014–9/2016
INTERNATIONAL WORKSHOP AND CONFERENCE ORGANIZATION	
Together with Christoph Stahl organized the concluding symposium of the 14th Dissertation Competition of the German Society for Psychology (DGPs) section General and Cognitive Psychology	16-18/5/2025 10 talks
Member of the organizing committee of the joint gathering of the 56th Annual Meeting of the Society for Mathematical Psychology (MathPsych), the 21st International Conference on Cognitive Modeling (ICCM), and the 52nd Meeting of the European Mathematical Psychology Group (EMPG) at the University of Amsterdam, the Netherlands	18-21/7/2023 200 talks 7 workshops 3 keynotes
Together with František Bartoš, Catherine Guazzone, Šimon Kucharský, Johnny van Doorn, Eric-Jan Wagenmakers, and Richard Morey, part of the organizing committee	15–16/7/2023 55 participants

for the ninth annual two-day JASP workshop "Theory and Practice of Bayesian Hypothesis Testing" at the University of Amsterdam, the Netherlands, and online

Together with František Bartoš, Frederik Aust, Catherine Guazzone, Manuel Villarreal, Lauren Montgomery, Šimon Kucharský, Don van den Bergh, Johnny van Doorn, Eric-Jan Wagenmakers, and Michael Lee, part of the organizing committee for the one–week "Eleventh Annual JAGS and Stan Workshop: Bayesian Modeling for Cognitive Science" at the University of Amsterdam, the Netherlands	10-14/7/2023 37 participants
Together with František Bartoš, Lukas Lengersdorff, Alexandra Sarafoglou, Jonas Petter, Šimon Kucharskýy, Angelika Stefan, Don van den Bergh, Eric-Jan Wagenmakers, and Richard Morey, part of the organizing committee for the eighth annual two–day JASP workshop "Theory and Practice of Bayesian Hypothesis Testing" at the University of Amsterdam, the Netherlands, and online	29–30/8/2022 55 participants
Together with František Bartšs, Lukas Lengersdorff, Alexandra Sarafoglou, Manuel Villarreal, Lauren Montgomery, Jonas Petter, Šimon Kucharský, Angelika Stefan, Johnny van Doorn, Eric-Jan Wagenmakers, and Michael Lee, part of the organizing committee for the one—week "Tenth Annual JAGS and Stan Workshop: Bayesian Modeling for Cognitive Science" at the University of Amsterdam, the Netherlands	22–26/8/2022 25 participants
Together with Angelika Stefan, Richard Morey, and Eric-Jan Wagenmakers part of the organizing committee for the seventh annual two—day JASP online workshop "Theory and Practice of Bayesian Hypothesis Testing"	26-27/8/2021 73 participants
Together with Tobias Heycke organized a one-day workshop "An Introduction to Bayesian Statistics: The Philosophy, Bayesian Linear Models, and Practical Data Analysis" taught by Richard D. Morey at the graduate school at University of Cologne Faculty of Human Sciences	23/10/2015 25 participants

## Reviewing and editorial services

#### **EDITORIAL SERVICES**

Statistics, Transparency, and Rigor (STAR) editor for *Psychological Science* Editorial assistant for *Experimental Psychology* 

1/2024-present

4/2014-6/2018

#### AD HOC REVIEWING

- Advances in Methods and Practices in Psychological Science (1)
- Behavior Research Methods (6)
- Cognition & Emotion (3)
- Collabra Psychology (2)
- Computational Brain & Behavior (2)
- Experimental Psychology (2)
- Journal of Cognitive Psychology (1)
- Journal of Experimental Psychology: General (2)
- Journal of Experimental Psychology: Human Perception and Performance (2)
- Journal of Experimental Psychology: Learning Memory and Cognition (7)
- Journal of Individual Differences (1)

- Journal of Mathematical Psychology (1)
- Nature Communications (3)
- Nature Human Behaviour (1)
- Neuroscience & Biobehavioral Reviews (2)
- PeerJ Computer Science (2)
- Perspectives on Psychological Science (1)
- Proceedings of the Human Factors and Ergonomics Society Annual Meeting (1)
- Psychological Methods (7)
- Psychological Science (1)
- Psychonomic Bulletin & Review (1)
- Social Psychological Bulletin (1)

## Invited presentations

**Aust**, **F.** (2024, March). *Pretty good bayes factors* [Invited talk at Bayes Statistics Discussion Forum at the Institute of Psychology, University of Zurich, Zurich, Switzerland].

- **Aust, F.** (2023a, December). Friends don't let friends copy-paste: Computationally reproducible apa-style manuscripts with the R package papaja [Invited talk at Banco de Portugal Microdata Research Laboratory (BPLIM) workshop: Automation of the Research Process, Porto, Portugal]. https://github.com/BPLIM/Workshops/tree/master/BPLIM2023
- **Aust**, **F.** (2023b, June). Exemplars as a least-committed alternative to dual-representations in learning and memory [Invited talk at Abschlusssymposium of the 13. Dissertation Competition of the German Society for Psychology's (DGPs) section General and Cognitive Psychology, University of Siegen, Germany].
- **Aust**, **F.** (2022, December). *Friends don't let friends copy-paste: Computationally reproducible apa-style manuscripts with the R package papaja* [Invited talk at Faculty of Psychology, University of Basel, Basel, Switzerland].
- **Aust**, **F.** (2019a, December). *An alternative to copy-paste reporting: Create dynamic, submission-ready, APA-style manuscripts in R with papaja* [Invited talk at Psychological Methods Lab, Ruhr-University, Bochum, Germany].
- **Aust**, **F.** (2017b, February). *A global-matching account of verbatim and gist processes in false recognition* [Invited talk at Quantitative Colloquim, Department of Psychological Sciences, University of Missouri, Columbia, MO].
- **Aust**, **F.** (2015, May). *Incremental validity of Useful Field of View subtests for the prediction of instrumental activities of daily living* [Invited talk at Psychological Assessment and Differential Psychology Colloquim, Department of Experimental Psychology, Heinrich-Heine-University, Düsseldorf, Germany].

### **Publications**

† indicates shared first authorship, \* indicates supervised Master student

#### **PREPRINTS**

- Bartoš, F., Sarafoglou, A., Godmann, H. R., Sahrani, A., Leunk, D. K., Gui, P. Y., Voss, D., Ullah, K., Zoubek, M. J., Nippold, F., **Aust**, **F.**, Vieira, F. F., Islam, C.-G., Zoubek, A. J., Shabani, S., Petter, J., Roos, I. B., Finnemann, A., Lob, A. B., ... Wagenmakers, E.-J. (2023). Fair coins tend to land on the same side they started: Evidence from 350,757 flips. https://arxiv.org/abs/2310.04153
- Heycke<sup>†</sup>, T., **Aust**<sup>†</sup>, **F.**, Banaji, M. R., Cone, J., Dessel, P. V., Ferguson, M., Hu, X., Jiang, E. C., Kurdi, B., Rydell, R., Spitzer, L., Stahl, C., Vitiello, C., & Houwer, J. D. (2020). Of two minds: A registered replication [Accepted in principle at *Psychological Science*]. https://psyarxiv.com/v674w/
- Stahl, C., & **Aust**, **F.** (2016). False memory for perceptually similar but conceptually distinct line drawings. https://psyarxiv.com/zr7m8/

#### **JOURNAL ARTICLES**

- Sarafoglou, A., Kuhlmann, B. G., **Aust**, **F.**, & Haaf, J. M. (in press). Refining bayesian hierarchical mpt modeling: Integrating prior knowledge and ordinal expectations. *Behavior Research Methods*. https://psyarxiv.com/kvyt5/
- Marsh, J. E., Hurlstone, M. J., Marois, A., Ball, L. J., Moore, S. B., Vachon, F., Schlittmeier, S. J., Röer, J. P., Buchner, A., **Aust**, **F.**, & Bell, R. (2024). Changing-state irrelevant speech disrupts visual-verbal but not visual-spatial serial recall. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *50*(11), 1772–1790. https://doi.org/10.1037/xlm0001360
- Singmann, H., Heck, D. W., Barth, M., Erdfelder, E., Arnold, N. R., **Aust**, **F.**, Calanchini, J., Gümüsdagli, F. E., Horn, S. S., Kellen, D., Klauer, K. C., Matzke, D., Meissner, F., Michalkiewicz, M., Schaper, M. L., Stahl, C., Kuhlmann, B. G., & Groß, J. (2024). Evaluating the robustness of parameter estimates in cognitive models: A meta-analytic review of multinomial processing tree models across the multiverse of estimation methods. *Psychological Bulletin*, *150*(8), 965–1003. https://doi.org/10.1037/bul0000434
- Diedenhofen, B., Hoffmann, A., **Aust**, **F.**, & Müller, S. (2023). Detecting applicant faking with a context-specific overclaiming questionnaire. *Journal of Individual Differences*. https://doi.org/10.1027/1614-0001/a000411

- Pawel, S., **Aust**, **F.**, Held, L., & Wagenmakers, E. J. (2023a). Power priors for replication studies. *TEST*. https://doi.org/10.1007/s11749-023-00888-5
- Pawel, S., **Aust**, **F.**, Held, L., & Wagenmakers, E. J. (2023b). Normalized power priors always discount historical data. *Stat*, *12*, e591. https://doi.org/10.1002/sta4.591
- Sarafoglou, A., **Aust**, **F.**, Marsman, M., Bartŏs, F., Wagenmakers, E. J., & Haaf, J. M. (2023). Multibridge: An R package to evaluate informed hypotheses in binomial and multinomial models. *Behavior Research Methods*. https://doi.org/10.3758/s13428-022-02020-1
- Stahl, C., Bena, J., **Aust**, **F.**, Mierop, A., & Corneille, O. (2023). A conditional judgment procedure for probing evaluative conditioning effects in the absence of feelings of remembering. *Behavior Research Methods*, 55, 4343–4368. https://doi.org/10.3758/s13428-023-02081-w
- Van Den Bergh, D., Wagenmakers, E. J., & **Aust**, **F.** (2023). Bayesian repeated-measures analysis of variance: An updated methodology implemented in JASP. *Advances in Methods and Practices in Psychological Science*, 6(2). https://doi.org/10.1177/25152459231168024
- Van Doorn, J., **Aust**, **F.**, Haaf, J. M., Stefan, A. M., & Wagenmakers, E. J. (2023). Bayes factors for mixed models. *Computational Brain & Behavior*, 6, 1–13. https://doi.org/10.1007/s42113-021-00113-2
- van Doorn, J., Haaf, J. M., Stefan, A. M., Wagenmakers, E., 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., ... **Aust**, **F.** (2023). Bayes factors for mixed models: A discussion. *Computational Brain & Behavior*, *6*, 140–158. https://doi.org/10.1007/s42113-022-00160-3
- Van Doorn<sup>†</sup>, J., **Aust**<sup>†</sup>, **F.**, Haaf, J. M., Stefan, A., & Wagenmakers, E. J. (2023). Bayes factors for mixed models: Perspective on responses. *Computational Brain & Behavior*, *6*, 127–139. https://doi.org/10.1007/s42113-022-00158-x
- Yun-Hong, W., van den Bergh, D., **Aust, F.**, Ly, A., Wagenmakers, E.-J., & Chuan-Peng, H. (2023). 胡传鹏. 贝叶斯方差分析在 JASP 中的实现 [The implementation of Bayesian ANOVA in JASP: A practical primer]. 心理技术与应用 [Psychology: Techniques and Application], 11(9), 528–541. http://www.xljsyyy.com/CN/Y2023/V11/I9/528
- Bartoš\*, F., **Aust**, **F.**, & Haaf, J. M. (2022). Informed bayesian survival analysis. *BMC Medical Research Methodology*, 22(1), 1–22. https://doi.org/10.1186/s12874-022-01676-9
- Kovacs, M., Holcombe, A., **Aust**, **F.**, & Aczel, B. (2021). Tenzing and the importance of tool development for research efficiency. *Information Services & Use*, *1*, 1–9. https://doi.org/10.3233/ISU-210109
- **Aust**, **F.**, & Stahl, C. (2020). The enhancing effect of 200 mg caffeine on mnemonic discrimination is at best small. *Memory*, 28(7), 858–869. https://doi.org/10.1080/09658211.2020.1781899
- Holcombe, A. O., Kovacs, M., **Aust**, **F.**, & Aczel, B. (2020). Documenting contributions to scholarly articles using CRediT and tenzing. *PLOS ONE*, *15*(12). https://doi.org/10.1371/journal.pone.0244611
- Moran, T., Hughes, S., Hussey, I., Vadillo, M. A., Olson, M. A., **Aust**, **F.**, & Bading, K. (2020). Incidental attitude formation via the surveillance task: A preregistered replication of the Olson and Fazio (2001) study. *Psychological Science*, 0956797620968526. https://doi.org/10.1177/0956797620968526
- **Aust**, **F.**, Haaf, J. M., & Stahl, C. (2019). A memory-based judgment account of expectancy-liking dissociations in evaluative conditioning. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 45(3). https://doi.org/10.1037/xlm0000600
- Klein, O., Hardwicke, T. E., **Aust**, **F.**, Breuer, J., Danielsson, H., & Mohr, A. H. (2018). A practical guide for transparency in psychological science. *Collabra: Psychology*, *4*(1). https://doi.org/10.1525/collabra.158
- Silberzahn, R., Uhlmann, E. L., Martin, D., Anselmi, P., **Aust**, **F.**, & Awtrey, E. C. (2018). Many analysts, one data set: Making transparent how variations in analytic choices affect results. *Advances in Methods and Practices in Psychological Science*, *1*(3), 337–356. https://doi.org/10.1177/2515245917747646
- Stahl, C., & **Aust**, **F.** (2018). Evaluative conditioning as memory-based judgment. *Social Psychological Bulletin*, 13(3), 1–30. https://doi.org/10.5964/spb.v13i3.28589

- Heycke, T., **Aust**, **F.**, & Stahl, C. (2017). Subliminal influence on preferences? A test of evaluative conditioning for brief visual conditioned stimuli using auditory unconditioned stimuli. *Royal Society Open Science*, *4*(9). https://doi.org/10.1098/rsos.160935
- Rouder, J. N., Haaf, J. M., & **Aust**, **F.** (2017). From theories to models to predictions: A bayesian model comparison approach. *Communication Monographs*, *1*, 1–16. https://doi.org/10.1080/03637751.2017.1394581
- **Aust, F.,** & Edwards, J. D. (2016). Incremental validity of Useful Field of View subtests for the prediction of instrumental activities of daily living. *Journal of clinical and experimental neuropsychology*, *38*(5), 497–515. https://doi.org/10.1080/13803395.2015.1125453
- **Aust**<sup>†</sup>, **F.**, Diedenhofen<sup>†</sup>, B., Ullrich, S., & Musch, J. (2013). Seriousness checks are useful to improve data validity in online research. *Behavior research methods*, 45(2), 527–535. https://doi.org/10.3758/s13428-012-0265-2
- **Aust**, **F.**, Moehlenbrink, C., & Jipp, M. (2011a). Operationalization of learned carelessness an experimental approach. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 55. https://doi.org/10.1177/1071181311551360

#### **BOOKS AND BOOK CHAPTERS**

- Wagenmakers, E.-J., & **Aust**, **F.** (2024). The strength of evidence. In E.-J. Wagenmakers & D. Matzke (Eds.), *Bayesian inference from the ground up* (Vol. 1). JASP Publishing.
- **Aust**, **F.** (2023c, January). *Exemplars as a least-committed alternative to dual-representations in learning and memory* [Doctoral dissertation, University of Cologne]. https://kups.ub.uni-koeln.de/64657/
- Caldwell, A. R., Lakens, D., Parlett-Pelleriti, C. M., Prochilo, G., & **Aust**, **F.** (2022). *Power analysis with Superpower*. Retrieved November 12, 2022, from https://aaroncaldwell.us/SuperpowerBook/

#### PUBLIC OUTREACH

- Hönig, L. (Host), Krautter, K. (Host), **Aust**, **F.**, & Barth, M. (2023, June). Programmieren in RStudio (No. 4.06) [Audio podcast episode]. In *Positiv korreliert*. https://podcasters.spotify.com/pod/show/luise-hnig/episodes/4-06-Programmieren-in-RStudio-e25q3de
- **Aust, F.** (2017a, August 28). *A conceptual introduction to mathematical modeling of cognition*. JEPS Bulletin. Retrieved November 9, 2022, from https://blog.efpsa.org/2017/08/28/a-conceptual-introduction-to-mathematical-modelling-of-cognition/

## R packages (selection) \_\_\_

<b>afex</b> Analysis of Factorial Experiments Singmann, H., Bolker, B., Westfall, J., <b>Aust, F.</b> , & Ben-Shachar, M. S.	122 GitHub stars <sup>1</sup> 15,583 dl/mo
<b>apathe</b> American Psychological Association Thesis with R Markdown <b>Aust, F.</b>	2 GitHub stars <sup>1</sup> Not on CRAN
citr RStudio Addin to Insert Markdown Citations  Aust, F.	409 GitHub stars <sup>1</sup> Not on CRAN
<ul><li>jab Automagically compute Jeffrey's Approximate Bayes factors</li><li>Aust, F.</li></ul>	2 GitHub stars <sup>1</sup> Not on CRAN
multibridge Evaluating Multinomial Order Restrictions with Bridge Sampling Sarafoglou, A., <b>Aust, F.</b> , Haaf, J. M., Goosen, J., Gronau, Q. F., & Marsman, M.	0 GitHub stars <sup>1</sup> 358 dl/mo

papaja Prepare American Psychological Association Journal Articles with R Markdown

Aust, F., & Barth, M.

Prereg R Markdown Templates to Preregister Scientific Studies

Aust, F., & Spitzer, L.

658 GitHub stars¹

1,534 dl/mo

48 GitHub stars¹

444 dl/mo

**retractcheck** Retraction Scanner Hartgerink, C., & **Aust, F.** 

24 GitHub stars<sup>1</sup> 190 dl/mo

Contributed code to the following packages: MPTmultiverse, Superpower, bookdown, broom, ggeffects, indiedown, rmarkdown

### Conference contributions

#### ORGANIZED SYMPOSIA

Haaf, J., & **Aust**, **F.** (2022b, April). *Bayesian advances in cognitive modeling* [Symposium accepted at the 63rd Tagung experimentell arbeitender Psychologen, Cologne, Germany].

### TALKS AND POSTERS (SELECTION)

\* indicates supervised Bachelor student

- **Aust**, **F.**, Haaf, J., de Haan, E., & Wagenmakers, E.-J. (2022, July). *Informative and efficient bayesian hypothesis tests for lesion studies* [Talk presented at the 56th Annual Meeting of the Society for Mathematical Psychology, Amsterdam, Netherlands. *Cancelled due to illness*].
- **Aust**, **F.**, & Musfeld, P. (2022, April). *Performance of bayes factor approximations for comparing nested hierar-chical sdt models* [Talk presented at the 63rd Tagung experimentell arbeitender Psychologen, Cologne, Germany].
- Haaf, J., & **Aust**, **F.** (2022a, April). *Bayesian advances to study individual differences with cognitive models* [Talk presented at the 63rd Tagung experimentell arbeitender Psychologen, Cologne, Germany].
- Sarafoglou, A., Haaf, J., **Aust**, **F.**, & Kuhlmann, B. (2022, April). *Bayes factors for disordinal interaction hypotheses in mpt models* [Talk presented at the 63rd Tagung experimentell arbeitender Psychologen, Cologne, Germany].
- Haaf, J., Evans, N., & **Aust**, **F.** (2020, April). *A strong test of empirical validity for cognitive process models* [Talk at the 62nd Tagung experimentell arbeitender Psychologen, Jena, Germany. *Cancelled due COVID-19 pandemic*].
- **Aust**, **F.** (2019b, July). *Extending papaja too prepare (even better) APA journal articles with r markdown* [Hackathon at the Society for Improving Psycholgical Science annual meeting, Rotterdam, the Netherlands].
- Henninger, F., Horsten, L., & **Aust**, **F.** (2019, July). *Building an open science knowledge base* [Hackathon at the Society for Improving Psychological Science annual meeting, Rotterdam, the Netherlands].
- **Aust, F.,** Heycke, T., & Stahl, C. (2018, September). *Does it replicate? Using Bayesian model comparisons to evaluate replication attempts of specific 2×2-interaction patterns* [Talk presented at DGPs Congress, Frankfurt, Germany]. https://frederikaust.com/ml-otm-dgps-slides/
- **Aust**, **F.**, Haaf, J., & Stahl, C. (2017, March). Reversed dissociation between CS evaluation and US expectancy through explicit reference to learning contexts [Talk presented at the Tagung Experimentell Arbeitender Psychologen, Dresden, Germany].
- Musfeld\*, P., **Aust**, **F.**, & Stahl, C. (2017, March). *False recognition in short-term memory may be due to encoding errors* [Poster presented at the Tagung Experimentell Arbeitender Psychologen, Dresden, Germany].

<sup>&</sup>lt;sup>1</sup>GitHub stars are used to bookmark projects and show appreciation to the maintainer for their work. GitHub stars and monthly downloads (dl/mo) are recommended criteria to judge the impact of software contributions (Gärtner et al., 2022).

- **Aust**, **F.**, & Stahl, C. (2016b, November). *A global-matching account of verbatim and gist processes in conjoint recognition* [Poster presented at the Computational Approaches to Cognition Symposium 2016, Boston, MA.].
- **Aust**, **F.**, & Stahl, C. (2016c, July). Effects of explicit reference to learning contexts on the extinction of evaluative conditioning and expectancies [Talk presented at 5th European Meeting on the Psychology of Attitudes, Cologne, Germany].

## Teaching and mentoring \_\_\_\_

#### **SUPERVISION**

Research internships
Martin Papenberg (B.Sc, 2012), Philipp Musfeld (B.Sc, 2015), Axel Gehlen (B.Sc, 2018), Sebastiaan de Vries (M.Sc, 2021)

B.Sc. theses psychology
Philipp Musfeld (2017), Amelie Jörgensen (2023), Eeva Hökkä (2023), Sacha van de Hoef (2023), Sam Semegne (2023)

M.Sc. theses psychology
František Bartoš (2021), Julia Timmke (2025)

# University courses

Multivariate Statistics Seminar, coordinator and lecturer M.Sc. Psychology, University of Cologne, 135 students	2024-2025 2×2 hrs/wk
<b>First-Year Psychology Orientation Week</b> , lecturer B.Sc. Psychology, University of Cologne, 150 students with Anne Gast	2024 2 hrs/wk equivalent
Statistics 2 Seminar, lecturer B.Sc. Psychology, University of Cologne, 132 students	2024 2 hrs/wk
Multivariate Statistics Seminar, coordinator and lecturer M.Sc. Psychology, University of Cologne, 116 students	2023-2024 2×2 hrs/wk
First-Year Psychology Orientation Week, lecturer B.Sc. Psychology, University of Cologne, 150 students with Anne Gast	2023 2 hrs/wk equivalent
Bayesian Statistics, practical lecturer  B.Sc. Psychology, University of Amsterdam, 8 students, with Julia M. Haaf and Michael D. Nunez	2022 2×2 hrs/wk
<ul> <li>Average teaching evaluation: 7.9 (Dutch grading system)</li> <li>Computational reproducibility: A minimum necessary condition for credibility</li> <li>Guest lecture in Good Research Practices course at University of Amsterdam</li> </ul>	17/11/2020 2 hrs
Mathematical Modeling in Psychology, senior lecturer B.Sc. Psychology, University of Amsterdam, 14 students, with Julia M. Haaf	6/2020 4 hrs/wk
<ul> <li>Average teaching evaluation: 6.9 (Dutch grading system)</li> <li>Statistics 2 Practical, coordinator and lecturer</li> </ul>	2020

B.Sc. Psychology, University of Cologne, 69 students

 $2 \times 2 \text{ hrs/wk}$ 

Statistics 2 Practical, coordinator and lecturer B.Sc. Psychology, University of Cologne, 62 students	2019 2×2 hrs/wk
Multivariate Statistics Practical, coordinator and lecturer M.Sc. Psychology, University of Cologne, 36 students	2017-2018 2×2 hrs/wk
Statistics 2 Practical, coordinator and lecturer B.Sc. Psychology, University of Cologne, 67 students	2017 2×2 hrs/wk
Multivariate Statistics Practical, coordinator and lecturer M.Sc. Psychology, University of Cologne, 47 students	2016-2017 2×2 hrs/wk
Statistics 1 Practical, coordinator and lecturer B.Sc. Psychology, University of Cologne, 53 students	2015-2016 2×2 hrs/wk
Statistics 1 Practical, coordinator and lecturer B.Sc. Psychology, University of Cologne, 95 students	2014-2015 3×2 hrs/wk
Practical Experimenting, lecturer B.Sc. Psychology, University of Cologne, 10 students	2014 2 hrs/wk
Statistics 2 Practical, coordinator and lecturer B.Sc. Psychology, University of Cologne, 85 students	2014 3×2 hrs/wk
Statistics 1 Practical, coordinator and lecturer B.Sc. Psychology, University of Cologne, 32 students	2013-2014 2 hrs/wk
INTERNATIONAL WORKSHOPS	
Getting started with R University of Siegen, Siegen, Germany.	21/02/2024 1 day
Friends don't let friends copy-paste: How to create computationally reproducible APA-style manuscripts with the R package papaja Dresden University of Technology, Dresden, Germany, Open material.	10/04/2022 1 day
Friends don't let friends copy-paste: How to create computationally reproducible APA-style manuscripts with the R package papaja As part of the lecture series <i>Practices and Tools of Open Science</i> , Leibniz Institute of Psychology, Trier, Germany, Open material.	16/11/2022 3 hrs
Friends don't let friends copy-paste: How to create computationally reproducible APA-style manuscripts with the R package papaja University of Hagen, Hagen, Germany, Open material.	4/11/2022 1 day
Friends don't let friends copy-paste: How to create computationally reproducible APA-style manuscripts with the R package papaja Linköping University, Linköping, Sweden, Open material.	24-26/10/2022 3 days
Reproducible research practices for psychologists KU Leuven, Leuven, Belgium, with Johannes Breuer, Open material.	27-28/4/2022 2 days
An alternative to copy-paste reporting: Create computationally reproducible, submission-ready, APA-style manuscripts in R with papaja Conference of Experimental Psychologists (TeaP) 2022, Cologne, Germany, with Marius Barth, Open material.	19/3/2022 3 hrs

A fully reproducible publication workflow: Analysis, report, and revision Linköping University, Linköping, Sweden	9-10/11/2021 3 days
An alternative to copy-paste reporting: Create computationally reproducible, submission-ready, APA-style manuscripts in R with papaja Laboratoire Inter-universitaire de Psychologie, France, Open material.	5/6/2020 1 day
An alternative to copy-paste reporting: Create computationally reproducible, submission-ready, APA-style manuscripts in R with papaja Max Planck School of Cognition Academy, Berlin, Germany, Open material.	17/1/2020 1 day
An alternative to copy-paste reporting: Create computationally reproducible, submission-ready, APA-style manuscripts in R with papaja European Conference on Visual Perception, Leuven, Belgium, with Marius Barth, Open material.	25/8/2019 1 day
Developing your personal workflow for transparent and reproducible research Society for Improving Psychological Science 2019 conference, Rotterdam, Netherlands, with Johannes Breuer, Open material.	9/7/2019 5 hrs
papaja: Prepare APA journal articles reproducibly with R Markdown Behavioral Science Institute, Radboud University, Nijmegen, The Netherlands, Open material.	19–20/11/2018 2 days
A practical primer on transparent research workflows EASP Solid Science Training Workshop, Bordeaux, France, Open material.	7/9/2018 5 hrs
A practical primer on transparent research workflows ESCON Transfer of Knowledge Conference, Cologne, Germany, with Johannes Breuer, Open material.	4/9/2018 5 hrs
papaja: Prepare APA journal articles reproducibly with R Markdown Linköping University, Linköping, Sweden, Open material.	13-14/8/2018 2 days
papaja: Prepare APA journal articles reproducibly with R Markdown Peer Mentoring Project Methods and Statistics, University of Zürich, Zürich, Switzerland, Open material.	30/11-1/12/2017 2 days
<b>Data Visualization in R</b> Society for Personality and Social Psychology's Annual Convention 2017, San Antonio, TX, with Maike Luhmann	20/1/2017 3 hrs