

Education

- 2019 – 2025 **Doctor of Philosophy**, Heidelberg University.
Supervisor: Prof. Dr. Jan Rummel
Thesis: Paving New Ways - The Case for Machine Learning in Political Psychology
Degree: Summa cum laude (*with highest honors*), graduation: June 2025
- 2017 – 2019 **Master of Science in Psychology**, Heidelberg University.
Degree: 1.1 (*very good*), graduation: August 2019
- 2013 – 2017 **Bachelor of Science in Psychology**, University of Bamberg.
Degree: 1.4 (*very good*), graduation: October 2017
- 2005 – 2013 **Higher education entrance qualification**, Christian-Rohlf-Gymnasium.
Degree: 1.4 (*very good*), graduation: July 2013

Research Experience

- Since 2025 **Postdoctoral researcher**, *Experimental Psychology and Cognitive Self Regulation Lab*, Department of Psychology, Heidelberg University.
- 2019 – 2025 **Research assistant**, *Experimental Psychology and Cognitive Self Regulation Lab*, Department of Psychology, Heidelberg University.
- 2018 **Student research assistant**, *Personnel development team*, Heidelberg University Hospital.
- 2014 – 2017 **Student research assistant**, *Department of General Psychology and Methodology*, Institute for Psychology, University of Bamberg.

Teaching Experience

- Since 2025 **Seminar: Science Communication (graduate & undergraduate course)**, Department of Psychology, Heidelberg University.
- Since 2023 **Seminar: Introduction to Machine Learning in Psychology (graduate course)**, Department of Psychology, Heidelberg University.
- Since 2019 **Seminar: Political Psychology (graduate & undergraduate course)**, Department of Psychology, Heidelberg University.

Publications

Journal articles

- 2026 Schmitt, J. B., **Brandenstein, N.**, Neubaum, G. & Sindermann, C. Generative KI und demokratische Meinungsbildung: Risiken verzerrter Informationsvermittlung und Informationsverarbeitung. In A. Beelmann, E.-L. Brakemeier, U. Wagner & W. G. Weber (Hrsg.). *Policy Ultra-Briefs aus der Psychologie und angrenzenden Verhaltenswissenschaften, Reihe 2 – Psychologie und Demokratieförderung*. <https://doi.org/10.1007/s10584-025-03900-z>
- 2025 **Brandenstein, N.**, Ackermann, K., & Rummel, J. The trouble with carbon footprint analysis in behavioral climate research. *Climatic Change*, 178(3), 57. <https://doi.org/10.1007/s10584-025-03900-z>
- 2024 **Brandenstein, N.**, Montag, C., & Sindermann, C. To Follow or Not to Follow: Estimating Political Opinion From Twitter Data Using a Network-Based Machine Learning Approach. *Social Science Computer Review*, 08944393241279418. <https://doi.org/10.1177/08944393241279418>
- 2023 **Brandenstein, N.**, Ackermann, K., Aeschbach, N., & Rummel, J. The key determinants of individual greenhouse gas emissions in Germany are mostly domain-specific. *Communications Earth & Environment*, 4(1), 422. <https://doi.org/10.1038/s43247-023-01092-x>
- 2022 **Brandenstein, N.** Going beyond simplicity: Using machine learning to predict belief in conspiracy theories. *European Journal of Social Psychology*, 52, 910-930. <https://doi.org/10.1002/ejsp.2859>

- 2020 **Brandenstein, N.** & Carbon, C. C. Verurteilt auf den ersten Blick? Über die Hintergründe und Macht des ersten Eindrucks. *In-Mind Magazin: Psychologie für Alle*, Ausgabe 01/2020. <https://de.in-mind.org/article/verurteilt-auf-den-ersten-blick-ueber-die-hintergruende-und-die-macht-des-ersten-eindrucks>
- 2019 **Brandenstein, N.**, Gebauer, F., & Carbon, C. C. How do we perceive “aliens”? About the implicit processes underlying the perception of people with alien paraphernalia. *Frontiers in Psychology*, 10, 1551. <https://doi.org/10.3389/fpsyg.2019.01551>

Conference talks & presentations

- 2026 Experiencing floods has only marginal effects on individual pro-environmental cognitions and behavior. Poster presentation @ 48th Annual Meeting of the Cognitive Science Society, Rio de Janeiro, Brazil (22-25.07.2026) & Conference of the Deutsche Gesellschaft für Psychologie (DGPs 2026), Luxembourg, Luxembourg (07-10.09.2026)
- 2026 Experiencing floods has only marginal effects on individual pro-environmental cognitions and behavior. Oral talk @ 24-hour of Political Psychology Conference, Vienna, Austria (16-27.03.2026)
- 2025 To follow or not to follow: Estimating political opinion from Twitter data using a network-based machine learning approach. Oral talk @ IPSA World Congress, Seoul, Korea (13-16.07.2025)
- The trouble with carbon footprint analysis in behavioral climate research. Oral talk @ ISPP Annual Meeting, Prague, Czech Republic (03-06.07.2025)
- 2024 To follow or not to follow: Estimating political opinion from Twitter data using a network-based machine learning approach. Oral talk @ German Political Psychology Meeting, Vienna, Austria (19-20.09.2024) & Conference of the Deutsche Gesellschaft für Psychologie (DGPs 2024), Vienna, Austria (16-19.09.2024)
- Predicting sustainable attitudes and behavior using machine learning. Invited oral talk @ IGSTC Workshop at IIT Mandi, Mandi, India. (18.-20.01.2024)
- 2023 Predicting individual greenhouse gas emissions in everyday life - A machine learning approach. Oral talk @ ISPP Annual Meeting, Montreal, Canada (09.-11.07.2023).
- 2022 Going beyond simplicity: Using machine learning to predict belief in conspiracy theories. Poster presentation @ ISPP Annual Meeting, Athens, Greece (14-17.07.2022).
- 2020 Less than meets the eye? Assessing the predictive power of personal factors regarding belief in conspiracy theories with machine learning. Oral talk @ 24-hour of Political Psychology Conference, Hagen, Germany (17.01.2020).

Membership, Awards and Reviews

Memberships

- Since 2026 Cognitive Science Society (CSS)
- Since 2025 Heidelberg Center for the Environment (HCE)
- International Political Science Association (IPSA)
- Since 2024 Organizational committee: German Political Psychology Network
- German Psychological Society (Deutsche Gesellschaft für Psychologie; DGPs)

Awards

- 2025 Travel grant: German Academic Exchange Service (DAAD)
- 2024 Travel grant: HeiDocs Mobility, Heidelberg University

Reviews

Completion of reviews for various international peer-reviewed journals, including: Nature Communications, Nature Humanities and Social Sciences, Journal of Information Technology & Politics, European Journal of Social Psychology

Languages & Skills

- Languages German, English, Spanish
- Programming Python, R, SPSS
- Languages
- Research methods Predictive modeling, Supervised & Unsupervised Machine Learning, Deep Neural Networks, Bayesian & Frequentist statistics