

BJÖRN S. SIEPE

Marburg, Germany

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EDUCATION

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| University of Marburg <i>PhD Student, Scientific Assistant</i> Psychological Methods Lab Supervisor: Prof. Dr. Daniel Heck | October 2022 - Current |
| Goethe University Frankfurt <i>M.Sc. Psychology</i> | November 2020 - September 2022 |
| Heidelberg University <i>B.Sc. Psychology</i> | October 2017 - September 2020 |
| Mannheim University <i>B.Sc. Economics</i> | October 2014 - August 2017 |
| Hölderlin-Gymnasium Heidelberg <i>Abitur (A-levels)</i> | September 2005 - June 2013 |

WORK EXPERIENCE

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| University of Marburg <i>Statistical Consultant, Center for Translational Clinical Psychology</i> Consulting on conceptualization, study planning, statistical analyses, and statistical programming. Focus: Time series analyses and predictive modeling. | February 2024 - Current |
| Freelance Work <i>Statistical Consultant</i> Consulting on conceptualization, study planning, statistical analyses, and statistical programming for clinical psychological researchers from multiple research groups. Focus: Cross-sectional and longitudinal network analyses | November 2022 - now |
| University of Groningen <i>Visiting PhD Student (PI: Laura Bringmann)</i> Research visit in the Psychometrics and Statistics Department | September 2024 - October 2024 |
| Goethe University Frankfurt <i>Student Assistant, Departments for Psychological Methods</i> Assisting in teaching for master courses in statistics, creating teaching materials and R scripts for open learning platform PandaR, teaching tutorials for master-level statistics courses | November 2021 - August 2022 |
| Leiden University <i>Research Intern, ERC-funded WARN-D Project (PI: Prof. Eiko Fried)</i> Working with experience sampling and passive sensor data in a project aiming to build an early-warning system for depression. | March 2022 - June 2022 |

Tasks: Handling EMA & Smartwatch Data in R, Statistical Analyses (Time Series, Network Analyses), Participant Recruitment

German Depression Foundation, Research Centre

March 2021 - April 2021

Research Intern, STEADY-project (PI: Prof. Ulrich Hegerl)

Summarizing literature, exploring statistical modelling options for intensive longitudinal experience sampling data, designing experience sampling study, data management in R

University Hospital Frankfurt

October 2020 - October 2021

Student Assistant, Horizon 2020-funded Eat2BeNice project

Working with experience sampling, nutrition, and passive sensor data to explore the connection of lifestyle variables and affective instability, data management & analysis in R

PZN Nordbaden (psychiatric clinic)

February 2020 - March 2020

Clinical Intern

Psychotherapy intern, data management, structured interviews, assistance with diagnostics & therapeutic tasks

Institute for Psychosocial Prevention Heidelberg

October 2019 - December 2019

Student Assistant

Transcription of videotaped psychotherapy sessions, data management

TEACHING EXPERIENCE

Philipps University Marburg

Summer Semesters 2023 & 2024

Tutor

Course: Critical reading of research papers (bachelor's level course about methodological criteria of research)

Philipps University Marburg

Winter Semesters 2022-2023 & 2023-2024

Tutor

Course: Multivariate Statistics (bachelor's level course about regression and latent variable modeling)

Brainhack School

2023

Teaching Assistant

Courses: Introduction to git/GitHub, Introduction to Machine Learning in Python, Introduction to Open Data, Introduction to Data Visualization in Python

Goethe University Frankfurt

Summer Semester 2022

Tutor

Course: Research Methods and Evaluation II (master's level course about latent variable modeling)

PUBLICATIONS

12. Kloft, M., **Siepe, B. S.** & Heck, D. W. (2024). The Interval Truth Model: A Consensus Model for Continuous Bounded Interval Responses. *PsyArXiv Preprint*.

<https://doi.org/10.31234/osf.io/dzv2>

11. Pawel, S., Bartoš, F.[†], **Siepe, B. S.**[†] & Lohmann, A.[†] (2024). Handling Missingness, Failures, and Non-Convergence in Simulation Studies: A Review of Current Practices and Recommendations.

[†]Shared second authorship

ArXiv Preprint.

<https://doi.org/10.48550/arXiv.2409.18527>

10. **Siepe, B. S.**, Tutunji, R., Rieble, C. L., Proppert, R. K. K., & Fried, E. I. (2024). Associations between ecological momentary assessment and passive sensor data in a large student sample. *PsyArXiv Preprint*.
<https://doi.org/10.31234/osf.io/ybns6>
9. Langener, A., **Siepe, B. S.**, Elsherif, M. M., Niemeijer, K., Andresen, P. K., Akre, S., ... Jacobson, N. C. (2024). A Template and Tutorial for Preregistering Studies Using Passive Smartphone Measures. *Behavior Research Methods*. Advance Online Publication.
<https://doi.org/10.3758/s13428-024-02474-5>
8. **Siepe, B.S.**, Bartoš, F., Morris, T. P., Boulesteix, A., Heck, D. W., & Pawel (2024). Simulation Studies for Methodological Research in Psychology: A Standardized Template for Planning, Pre-registration, and Reporting. *Psychological Methods*. In Press.
<https://doi.org/10.31234/osf.io/ufgy6>
7. **Siepe, B.S.**, Sander, C., Schultze, M., Kliem, A., Ludwig, S., Hegerl, U., & Reich, H. (2024). Time-Varying Network Models for the Temporal Dynamics of Depressive Symptomatology in Patients With Depressive Disorders: Secondary Analysis of Longitudinal Observational Data. *JMIR Mental Health*, 11:e50136.
<https://doi.org/10.2196/50136>
6. **Siepe, B.S.**, Kloft, M., Heck, D.W. (2024). Bayesian Estimation and Comparison of Idiographic Network Models. *Psychological Methods*. In Press.
<https://doi.org/10.31234/osf.io/uwfjc>
5. Westhoff, M., Heshmati, S., **Siepe, B. S.**, Vogelbacher, C., Ciarrochi, J., Hayes, S. C., & Hofmann, S. G. (2024). Psychological flexibility and cognitive-affective processes in young adults' daily lives. *Scientific Reports* 14, 8182.
<https://doi.org/10.1038/s41598-024-58598-3>
4. **Siepe, B. S.**, Rieble, C. L., Tutunji, R., Rimpler, A., März, J., Proppert, R. K. K., & Fried, E. I. (2024). Understanding EMA Data: A Tutorial on Exploring Item Performance in Ecological Momentary Assessment Data. *PsyArXiv Preprint*.
<https://doi.org/10.31234/osf.io/dvj8g>
3. Rimpler, A., **Siepe, B. S.**, Rieble, C. L., Proppert, R. K., & Fried, E. I. (2024). Introducing FRED: Software for Generating Feedback Reports for Ecological Momentary Assessment Data. *Administration and Policy in Mental Health and Mental Health Services Research*, 1-11.
<https://doi.org/10.1007/s10488-023-01324-4>
2. **Siepe, B. S.**, & Heck, D. W. (2023). Multiverse analysis for dynamic network models: Investigating the influence of plausible alternative modeling choices. *OSF Preprint*.
<https://doi.org/10.31219/osf.io/etm3u>
1. Talia, A., Georg, A., **Siepe, B.S.**, Gullo, S., Miller-Bottomo, M., Volkert, J., ... & Taubner, S. (2022). An exploratory study on how attachment classifications manifest in group psychotherapy. *Research in Psychotherapy: Psychopathology, Process and Outcome*, 25(3), 286-298.
<https://doi.org/10.4081/ripppo.2022.653>

INVITED TALKS

4. *Exploration of Ecological Momentary Assessment Data*. Invited Talk, Measurement is the new black consortium meeting, May 2024, online.

3. *Historical and Recent Trends in the Forecasting Literature*. Invited Talk, WARN-D Group Friday Science Meeting, Leiden University (February 2024), online.
2. *Good Practices for Simulation Studies*. Invited Talk, ReproducibiliTea Frankfurt (November 2023), online.
1. *Journal of European Psychology Students & Academic Writing Primer*. Invited Talk, EFPSA Research Summer School (July 2021), online.

WORKSHOPS

4. *Introduction to Dynamic Network Analysis*. 2 h Workshop, DYNAMIC Centre ECR Day, Goethe University Frankfurt, Germany (October 2024).
3. *Analysis of Pre-Post Designs*. 1.5 h Workshop, Department of Clinical Psychology and Psychotherapy, University of Marburg, Germany (March 2024).
2. *Dynamic Network Analysis in R*. 3 h Workshop, Department of Clinical Psychology and Psychotherapy, Goethe University Frankfurt, Germany (June 2023).
1. *Introduction to Dynamic Network Analysis*. 1.5 h Workshop, Department of Clinical Psychology and Psychotherapy, Goethe University Frankfurt, Germany (March 2023).

CONFERENCE PRESENTATIONS

2024

9. *Bayesian Estimation and Comparison of Idiographic Network Models*. Symposium Presentation, International Meeting of the Psychometric Society (IMPS), Prague, Czech Republic.
8. *Quality Standards for Simulation Studies in Psychometrics*. Panel Discussion Participant, International Meeting of the Psychometric Society (IMPS), Prague, Czech Republic.
7. *Simulation Studies for Methodological Research in Psychology*. Lightning Talk, Virtual Meeting of the Society for the Improvement of Psychological Science (SIPS), online.
6. *Simulation Studies for Methodological Research in Psychology*. Presentation, Virtual Meeting of the Society for Mathematical Psychology, online.

2023

5. *Bayesian Estimation and Comparison of Idiographic Network Models*. Symposium Presentation, Meeting of the German Society for Methods & Evaluation in Psychology (FGME), Konstanz, Germany.
4. *Augmenting Self-Reports with Passive Sensor Data to Understand Changes in Mental Health*. Symposium Presentation, Annual Convention of the American Psychological Society (APS), Washington D.C., US.*
3. *Developing EMA Items to Build an Early Warning System for Depression (WARN-D Study)*. Symposium Presentation, Annual Convention of the American Psychological Society (APS), Washington D.C., US.
2. *Using passive sensor data to understand changes in mental health outcomes*. Symposium Presentation, International Convention of Psychological Science (ICPS), Brussels, Belgium.*

2022

1. *Temporal Dynamics of Depressive Symptomatology*. Presentation, Annual Meeting of the German Society for Psychiatry and Psychotherapy (DGPPN), Berlin, Germany.

*Shared first-authorship or coauthor with significant contributions to presentation

SOFTWARE

1. **Siepe, B.S. & Kloft, M.** (2024). **tsnet** - Comparing and Visualizing Networks based on Time Series Data (R Package). Available on CRAN (<https://cran.r-project.org/web/packages/tsnet/index.html>).

GRANTS & AWARDS

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| Student Teaching Award | July 2024 |
| Awarded by the student council psychology at the University of Marburg | |
| DAAD Conference Stipend | July 2024 |
| Amount: 950€ | |
| Marburg Research Academy Conference Funding | July 2024 |
| Amount: 1,500€. Co-Applicant on behalf of Open Science Initiative University of Marburg | |
| APS Conference Financial Assistance | March 2023 |
| Amount: 400\$ | |
| Erasmus Internship Stipend | March 2022 |
| Amount: 1.089€ | |
| German Federal Scholarship (Deutschlandstipendium) | October 2021 |
| Amount: 3.600€ (over one year) | |

PROFESSIONAL TRAINING

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| Linear Algebra for Machine Learning , Imperial College London, Coursera | 2022 |
| Modeling the Dynamics of Intensive Longitudinal Data , Utrecht Summer School | 2021 |
| Introduction to Statistical Learning , StanfordOnline, edx Course | 2021 |
| Practical Time Series Analysis , SUNY, Coursera | 2021 |
| Improving your Statistical Inferences , TU Eindhoven, Coursera | 2020 |

ACADEMIC SERVICE

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| Member of Doctoral Committee Department of Psychology, Uni Marburg | 2023 - present |
| Board Member Open Science Initiative, Uni Marburg | 2022 - present |
| Co-Organizer Brainhack Marburg | 2023 & 2024 |
| Co-Organizer Open Science Days Marburg | 2023 |
| Co-Host ReproducibiliTea Frankfurt | 2022 |
| Editorial Team, Journal of European Psychology Students | 2021 - 2023 |
| Student Council Psychology, Goethe University Frankfurt | 2021 - 2022 |

COMMUNITY SERVICE

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| CorrelAid Volunteer | 2024 - present |
| Student tutor at Asylarbeitskreis Heidelberg (refugee aid) | 2015 - 2021 |
| Co-host of yearly after-school orientation day, Hölderlin-Gymnasium | 2019 - 2021 |
| Involvement with Jugend Rettet (refugee aid) | 2017 - 2018 |
| Assistant coach, youth soccer team of ASC Neuenheim | 2013 - 2014 |

SKILLS

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| Languages | German (mother tongue), English (fluent), French (basic skills) |
| Programming | R, Python, Stan, Git |
| Analyses | Network Analyses, Time Series Analyses, Machine Learning, Bayesian Statistics |
| Other | GIMP, L ^A T _E X, Markdown, Quarto, reveal.js |

REVIEWING

Ad-Hoc reviewer for *Administration and Policy in Mental Health and Mental Health Services Research*; *Behavior Research Methods*; *Brain, Behavior, & Immunity - Health*; *Acta Psychiatrica Scandinavica*; *Advances in Methods and Practices in Psychological Science*; *Child Psychiatry & Human Development*.
Reviewer for the Bi-Annual Meeting (2024) of the *German Psychological Society (DGPS)*.