

BJÖRN S. SIEPE

Marburg, Germany

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EDUCATION

University of Marburg

October 2022 - Current

PhD Student, Scientific Assistant

Psychological Methods Lab

Supervisor: Prof. Dr. Daniel Heck

Goethe University Frankfurt

November 2020 - September 2022

M.Sc. Psychology

Heidelberg University

October 2017 - September 2020

B.Sc. Psychology

Mannheim University

October 2014 - August 2017

B.Sc. Economics

Hölderlin-Gymnasium Heidelberg

September 2005 - June 2013

Abitur (A-levels)

WORK EXPERIENCE

University of Marburg

February 2024 - Current

Statistical Consultant, Center for Translational Clinical Psychology

Consulting on conceptualization, study planning, statistical analyses, and statistical programming.

Focus: Time series analyses and predictive modeling.

Freelance Work

November 2022 - now

Statistical Consultant

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

University of Groningen

September 2024 - October 2024

Visiting PhD Student (PI: Laura Bringmann)

Research visit in the Psychometrics and Statistics Department

Goethe University Frankfurt

November 2021 - August 2022

Student Assistant, Departments for Psychological Methods

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

Leiden University

March 2022 - June 2022

Research Intern, ERC-funded WARN-D Project (PI: Eiko Fried)

Working with experience sampling and passive sensor data in a project aiming to build an early-warning system for depression.

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. **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*. Advance Online Publication. <https://doi.org/10.31234/osf.io/ufgy6>

11. 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/dzvw2>
10. 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. *ArXiv Preprint*.
<https://doi.org/10.48550/arXiv.2409.18527>
9. **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>
8. 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>
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*. Advance Online Publication.
<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-Bottome, 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

[†]Shared second authorship

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

5. *Introduction to Data Visualization in R*. 1 h Interactive Session, Correlaid R Learning Program, Online (November 2024).
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.

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

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.

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>).

SUPERVISION

First Supervisor: 6 Bachelor's, 2 Master's theses

Second Supervisor: 4 Bachelor's, 6 Master's theses

GRANTS & AWARDS

DAAD Research Travel Stipend August 2024

Amount: 2.259€. Financing research stay in Groningen

Student Teaching Award July 2024

Awarded by the student council psychology at the University of Marburg

DAAD Conference Stipend July 2024

Amount: 950€. Travel to the IMPS 2024 Annual Meeting

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€. Financing research stay in Leiden

German Federal Scholarship (Deutschlandstipendium) October 2021

Amount: 3.600€ (over one year)

PROFESSIONAL TRAINING

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

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

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

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*; *textitJournal of Consulting & Clinical Psychology*.

Reviewer for the Bi-Annual Meeting (2024) of the *German Psychological Society (DGPS)*.