# BJÖRN S. SIEPE

bjoernsiepe [at] gmail [dot] com  $\diamond$  https://bsiepe.github.io Marburg, Germany 24th of June, 2025

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EDUCATION	
University of Marburg PhD Student	10/2022 - present
Goethe University Frankfurt M.Sc. Psychology	11/2020 - 09/2022
Heidelberg University B.Sc. Psychology	10/2017 - 09/2020
Mannheim University B.Sc. Economics	10/2014 - 08/2017
$ \begin{array}{c} \textbf{H\"{o}lderlin-Gymnasium Heidelberg} \\ Abitur \ (A\text{-}levels) \end{array} $	09/2005 - 06/2013
WORK EXPERIENCE	
University of Marburg Scientific Assistant, Psychological Methods Lab (PI: Daniel Heck)	10/2022 - present
LOEWE Center DYNAMIC Statistical Consultant	02/2025 - present
Consulting on conceptualization, study planning, statistical analys	ses, and statistical programming.
University of Marburg Statistical Consultant, Center for Translational Clinical Psycholog	02/2024 - present $y$
Consulting on conceptualization, study planning, statistical analys	ses, and statistical programming.
Freelance Work Statistical Consultant	11/2022 - present
Consulting on conceptualization, study planning, statistical analysic clinical psychological researchers from multiple research groups.	ses, and statistical programming for
University of Groningen Visiting PhD Student (PI: Laura Bringmann)	09/2024 - 10/2024
Research visit in the Psychometrics and Statistics Department	
Goethe University Frankfurt Student Assistant, Departments for Psychological Methods	11/2021 - 08/2022
Leiden University Research Intern, ERC-funded WARN-D Project (PI: Eiko Fried)	03/2022 - 06/2022
Working with experience sampling and passive sensor data in a proj system for depression.	ject aiming to build an early-warning
German Depression Foundation, Research Centre	03/2021 - 04/2021

10/2020 - 10/2021

 $Student\ Assistant,\ Horizon\ 2020\mbox{-}funded\ Eat2BeNice\ project$ 

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

University Hospital Frankfurt

# PZN Nordbaden (psychiatric clinic)

Clinical Intern

# Institute for Psychosocial Prevention Heidelberg

Student Assistant

10/2019 - 12/2019

02/2020 - 03/2020

#### TEACHING EXPERIENCE

#### Philipps University Marburg

2023 & 2024 & 2025

Tutor

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

## Philipps University Marburg

2022 & 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

2022

Tutor

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

#### **PUBLICATIONS**

#### 2025

- 15. **Siepe, B.S.**, Kloft, M., Zhang, Y., Petersen, F., Bringmann, L.F., & Heck, D.W. (2025). Using features of dynamic networks to guide treatment selection and outcome prediction: The central role of uncertainty. *PsyArXiv Preprint* https://doi.org/10.31234/osf.io/2c8xf\_v1
- 14. **Siepe, B. S.**, Rieble, C. L., Tutunji, R., Rimpler, A., März, J., Proppert, R. K. K., & Fried, E. I. (2025). Understanding EMA Data: A Tutorial on Exploring Item Performance in Ecological Momentary Assessment Data. *Advances in Methods and Practices in Psychological Science*, 8(1). https://doi.org/10.1177/25152459241286877
- 13. Cloos, Leonie<sup>‡</sup>, **Siepe, B.S.**<sup>‡</sup>, Piccirillo, M., Fried, E.I., Wang, S.B., Helmich, M.A., Johnson, S.U., Hoffart, A. & Ebrahimi, O.V. (2025). Accuracy and Consistency of Visual Analog Scales in Ecological Momentary Assessment and Digital Studies. *OSF Preprint* https://doi.org/10.31219/osf.io/h2p4w\_v1
- 12. **Siepe, B. S.**, Kloft, M., Aktepe, S. C., & Heck, D. W. (2025). A Robustness Reproduction of Cox et al. (2023). *I4R Discussion Paper Series No. 196*. https://hdl.handle.net/10419/308794

#### 2024

11. **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, Preregistration, and Reporting. *Psychological Methods*. Advance Online Publication. https://doi.org/10.31234/osf.io/ufgy6

<sup>&</sup>lt;sup>‡</sup>Shared first authorship

- 10. 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
- 9. Pawel, S., Bartoš, F.<sup>†</sup>, **Siepe, B. S.**<sup>†</sup> & Lohmann, A.<sup>†</sup>(2024). Handling Missingness, Failures, and Non-Convergence in Simulation Studies: A Review of present Practices and Recommendations. *ArXiv Preprint*.

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

8. **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

- 7. 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
- 6. **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

- 5. **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
- 4. 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
- 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

#### 2023

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

#### 2022

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

## **BOOK CHAPTERS**

#### 2021

<sup>†</sup>Shared second authorship

1. Talia, **Siepe, B.S.**(2021). Von der Wiege bis in den Behandlungsraum: Zur Manifestation von Bindungsmustern in der Psychotherapie *Bindung und psychische Störungen: Ursachen, Behandlung und Prävention* 

#### INVITED TALKS

### 2025

- 7. Simulation Studies for Methodological Research: State of the Art, Issues, and Potential Solutions. Colloquium of the Statistics and Psychological Methods Working Unit, University of Münster (June 2025).
- 6. Simulation Studies for Methodological Research: State of the Art, Issues, and Potential Solutions. Invited Talk with Samuel Pawel, Colloquium of the Methods and Evaluation / Quality Assurance Unit, Freie Universität Berlin (April 2025), online.
- 5. Why, when, and how (not) to preregister. Invited Talk, Neurophysics Group Meeting, Department of Physics, University of Marburg (February 2025).

#### 2024

- 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.

#### 2023

2. Good Practices for Simulation Studies. Invited Talk, ReproducibiliTea Frankfurt (November 2023), online.

# 2021

1. Journal of European Psychology Students & Academic Writing Primer. Invited Talk, EFPSA Research Summer School (July 2021), online.

#### WORKSHOPS

#### 2025

- 8. Reproducible research in R and Quarto. 6h workshop for the Graduate School of Education, University of Wuppertal (June 2025).
- 7. Research on research methods. 3h workshop on simulation studies for German students and PhD candidates, with Susanne Frick & Julien Irmer, online (May 2025).
- 6. Preregistration in psychology and related fields. 4h Workshop, with Anabel Büchner, Berlin University Alliance (January 2025).

#### 2024

- 5. Introduction to Data Visualization in R. 1h Interactive Session, Correlaid R Learning Program, Online (November 2024).
- 4. Introduction to Dynamic Network Analysis. 2h Workshop, DYNAMIC Centre ECR Day, Goethe University Frankfurt (October 2024).
- 3. Analysis of Pre-Post Designs. 1.5h Workshop, Department of Clinical Psychology and Psychotherapy, University of Marburg (March 2024).

#### 2023

- 2. Dynamic Network Analysis in R. 3h Workshop, Department of Clinical Psychology and Psychotherapy, Goethe University Frankfurt (June 2023).
- 1. Introduction to Dynamic Network Analysis. 1.5h Workshop, Department of Clinical Psychology and Psychotherapy, Goethe University Frankfurt (March 2023).

#### CONFERENCE PRESENTATIONS

#### 2025

- 12. Associations between ecological momentary assessment and passive sensor data in a large student sample. Symposium Presentation, Annual Meeting of the Society for Ambulatory Assessment 2025, Leuven, Belgium.
- 11. GIMME, GIMME more (network models): Multiverse analysis for dynamic network models. Symposium Presentation and Co-Chair of the Symposium, Annual Meeting of the Society for Ambulatory Assessment 2025, Leuven, Belgium.
- 10. Simulation Studies for Methodological Research in Psychology. Symposium Presentation, 7th Joint Statistical Meeting of the German Statistical Working Group (DAGStat), Berlin, Germany.

### 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.

<sup>\*</sup>Shared first-authorship or coauthor with significant contributions to presentation

#### POSTER PRESENTATIONS

#### 2025

1. Taking uncertainty into account is central when using dynamic network features as predictors. Poster Presentation, Annual Meeting of the Society for Ambulatory Assessment 2025, Leuven, Belgium.

### **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: 7 Bachelor's, 2 Master's theses Second Supervisor: 6 Bachelor's, 10 Master's theses

#### AWARDS

Best Poster Award 05/2025

Awarded at the Society for Ambulatory Assessment Conference 2025 for the poster "Taking uncertainty into account is central when using dynamic network features as predictors"

# Student Teaching Award

07/2024

Awarded by the student council psychology at the University of Marburg

#### **GRANTS**

DAAD Research Travel Stipend	08/2024
Amount: 2.259€. Financing research stay in Groningen	
Student Teaching Award	07/2024
Awarded by the student council psychology at the University of Marburg	
DAAD Conference Stipend	07/2024
Amount: 950€. Travel to the IMPS 2024 Annual Meeting	
Marburg Research Academy Conference Funding	07/2024
Amount: 1.500€. Co-Applicant on behalf of Open Science Initiative University of Mark	ourg
APS Conference Financial Assistance	03/2023
Amount: 400\$	
Erasmus Internship Stipend	03/2022
Amount: 1.089€. Financing research stay in Leiden	
German Federal Scholarship (Deutschlandstipendium)	10/2021

#### PROFESSIONAL TRAINING

Amount: 3.600€ (over one year)

Combining R and C++, DAGStat	2025
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 Professorship Appointment Committee for a Clincal Professorship, I	Department of Psychol-
ogy, Uni Marburg	2025 - present
Head of the special interest group for quality standards for simulation studies of t	the Quantitative Meth-
ods Subgroup of the German Psychological Association	2025 - present
Member of Doctoral Committee, Department of Psychology, Uni Marburg	2023 - present
Board Member Open Science Initiative, Uni Marburg	2022 - present
Co-Organizer Brainhack Marburg	$2023 \ \& \ 2024 \ \& \ 2025$
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

#### PROFESSIONAL MEMBERSHIPS

Member of the Society for Ambulatory Assessment (SAA)	2025 - present
Member of the German Society for Psychology (DGPS)	2023 - present

#### 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**

L	anguages	German	(mother	$^{\circ}$ tongue),	, English	(fluent),	French (	(basic skills)	)
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**Programming** R, Python, Stan, Git, Docker

Analyses Time Series Analysis, Network Analysis, Machine Learning,

Bayesian Statistics

Other GIMP, LATEX, 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; Journal of Consulting & Clinical Psychology; Psychological Methods; npj Digital Medicine; Nature Human Behaviour; Multivariate Behavioral Research; Journal of Open Source Software; Cognitive Therapy and Research.

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