

# Ruben Lukas Bach

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## EDUCATION

**Dr. rer. soc.** (Sociology), University of Mannheim (03/2018).

*Visiting PhD Student*, Institute for Social Research, University of Michigan-Ann Arbor (09 - 12/2017).

**M.Sc.** (Socio-Economics), Friedrich-Alexander University Erlangen-Nuremberg (01/2015).

**B.A.** (Social Sciences), Heinrich-Heine University Düsseldorf (09/2012).

## AREAS OF INTEREST & EXPERTISE

Societal impact of AI, Big Data & New Data Sources for Social Research (Web Logs, Search Queries, Reddit), Measurement Error, Motivated Misreporting, Online Privacy, Panel Conditioning, Response Propensities.

*Statistical Methods*: Causal Inference, Machine Learning, Natural Language Processing.

## CURRENT AFFILIATIONS

**Postdoctoral Researcher**, School of Social Sciences, University of Mannheim and Collaborative Research Center SFB 884 "Political Economy of Reforms", University of Mannheim (since 01/2018).

## WORK EXPERIENCE

**Research Associate & PhD Student**, Statistical Methods Department, Institute for Employment Research (IAB), Nuremberg and Joint Graduate Program (IAB and University of Erlangen-Nuremberg) (02/2015 - 01/2018).

## PUBLICATIONS

### *Refereed Journal Articles*

1. Amaya, A., **Bach, R.**, Keusch, F., and Kreuter, F. New Data Sources in Social Science Research: Things to Know Before Working with Reddit Data. *Social Science Computer Review*. Online first. (<https://doi.org/10.1177/0894439319893305>)
2. **Bach, R.**, Kern, C., Amaya, A., Keusch, F., Kreuter, F., Hecht, J., and Heinemann, J. Predicting Voting Behavior Using Digital Trace Data. *Social Science Computer Review*. Online first. (<https://doi.org/10.1177/0894439319882896>)
3. **Bach, R.**, Eckman, S., and Daikeler, J. Misreporting Among Reluctant Respondents. *Journal of Survey Statistics and Methodology*. Online first. (<https://doi.org/10.1093/jssam/smz013>)
4. Daikeler, J., **Bach, R.**, Eckman, S., and Silber, H. Motivated Underreporting in Mobile Phone Surveys. *Social Science Computer Review*. (<https://doi.org/10.1177/0894439319900936>)
5. **Bach, R.** and Eckman, S. (2020). Rotation Group Bias in Reporting of Household Purchases in the U.S. Consumer Expenditure Survey. *Economic Letters*, 187. (<https://doi.org/10.1016/j.econlet.2019.108889>)
6. **Bach, R.** and Eckman, S. (2019). Participating in a Panel Study Changes Respondents' Labour Market Behaviour. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 182(1), 263–281. (<https://doi.org/10.1111/rssa.12367>)
7. **Bach, R.** and Eckman, S. (2018). Motivated Misreporting in Web Panels. *Journal of Survey Statistics and Methodology*, 6(3), 418–430. (<https://doi.org/10.1093/jssam/smx030>)

### *Book Chapters*

8. Amaya, A., **Bach, R.**, Keusch, F., and Kreuter, F. (in press). Measuring Attitude Strength in Social Media Data. In Hill, C.A., et al. (Eds.) *Big Data Meets Survey Science*. Hoboken, NJ: Wiley.

### *Working Papers*

**Bach, R.** and Eckman, S. (2017). Does Participating in a Panel Study Change Respondents' Labour Market Behaviour? *IAB Discussion Paper*, 15/2017. (<http://doku.iab.de/discussionpapers/2017/dp1517.pdf>)

### **Manuscripts in Submission**

**Bach, R.** A Methodological Framework for the Analysis of Panel Conditioning Effects. (Accepted as Chapter in Cernat, A. and Sakshaug, J. (Eds.). *Measurement Error in Longitudinal Data*.)

**Bach, R.** and Wenz, A. Using Digital Trace Data for Research Into Individuals' Health. (under review)

Haas, G.-C., Eckman, S., **Bach, R.**, and Kreuter, F. Effects of Paper and Web Modes on Response Burden in Establishment Surveys. (R&R)

### **Ongoing Projects**

*What you read is who you support? Online news consumption and political preferences.* (with Kern, C. and Bonnay, D.) *Fairness in Automated Decision-Making.* (with Kern, C. and Kreuter, F.) *Equipping Offline Households with Internet Access in an Online Panel. Does It Make a Difference?* (with Cornesse, C.) *Moving Establishment Surveys from Mail to Web: Unit and Item Nonresponse.* (Haas, G.-C., Eckman, S., and Kreuter, F.) *The Relationship between Response Propensities and Data Quality in a Probability-based Panel Survey.* (with Gummer, T., Daikeler, J., and Eckman, S.)

**INVITED TALKS** Mannheim Centre for European Social Research (MZES, 2019); U.S. Bureau of Labor Statistics (2016); Ludwig-Maximilians-University (2015).

### **CONFERENCE PRESENTATIONS**

AAPOR: 2016, 2017, 2019; BigSurv18; ESRA: 2015, 2017, 2019; GOR: 2019; JSM: 2015, 2016; MOLS II.

### **TEACHING**

#### **University of Mannheim**

*Research Design: Causal Inference* (6 ECTS graduate course), Fall Semester (2018, 2019). *Master's Thesis Colloquium Sociology* (3 ECTS graduate course), Spring Semester (2019). *Introduction to Big Data & Analytics*, Summer School, Mannheim Business School (2019). *Research Practicum: Big Data in the Social Sciences* (in German; 6 ECTS undergraduate course), Spring Semester (2018).

#### **University of Erlangen-Nuremberg**

*Introduction to Web Surveys* (in German; 5 ECTS undergraduate course), Winter Semester (2017/2018).

#### **Theses supervision**

*M.Sc. Business Informatics*: Kennedy, A. *M.A. Sociology*: Gerdon, F., Schwerdtfeger, M.

### **GRANTS & AWARDS**

Lorenz-von-Stein Dissertation Award (MZES, 2019), Burns "Bud" Roper Fellow Award (AAPOR, 2019), Travel Award (BigSurv18, 2018 and AAPOR, 2017), Student Paper Award (MOLS II Conference, 2018), Fully-funded Three-year Scholarship (IAB, 2015-2017).