

# JONAS KLINGWORT | CURRICULUM VITAE

## Contact Information

PD Dr. habil. Jonas Klingwort  
Kempenweg 25  
40699 Erkrath, Germany  
☎ (+49) 174 2027888  
✉ jonas.klingwort@gmail.com

## Professional Experience

|             |  |                                 |
|-------------|--|---------------------------------|
| 09/16– ...  | <b>Methodologist</b>   | Statistics Netherlands (CBS)    |
|             | <ul style="list-style-type: none"><li>▶ Research &amp; Development (05/20 – ...)<br/>Research program leader 'Big Data' (02/25 – ...)<br/>International communication officer (ICO) (07/25 – ...)</li><li>▶ Center for Big Data Statistics (05/18 – 05/20)</li></ul> |                                 |
| 05/16–12/20 | <b>Research Associate</b>  | University Duisburg-Essen (DUE) |
|             | <ul style="list-style-type: none"><li>▶ Chair of Empirical Social Research (Research Methodology Group)</li></ul>  |                                 |
| 03/16–09/16 | <b>Intern</b>  | CBS                             |
|             | <ul style="list-style-type: none"><li>▶ Methodology Research Department</li></ul>  |                                 |
| 09/13–12/13 | <b>Intern</b>  | Innofact AG                     |
|             | <ul style="list-style-type: none"><li>▶ Research and Development Department</li></ul>  |                                 |
| 04/12–03/16 | <b>Student Research Assistant</b>  | DUE                             |
|             | <ul style="list-style-type: none"><li>▶ Chair of Empirical Social Research (Research Methodology Group)</li></ul>  |                                 |
| 10/09–06/10 | <b>Soldier</b>   | Deutsche Bundeswehr             |
|             | <ul style="list-style-type: none"><li>▶ German Army (Private first class), Basic Military Service, OA-Bt1 Idar-Oberstein, Germany</li></ul>  |                                 |

## Education

|             |  |           |
|-------------|--|-----------|
| 06/2025     | <b>Habilitation</b>  | DUE & CBS |
|             | <ul style="list-style-type: none"><li>▶ Thesis: Quantifying dimensions of society: Methods, approaches and challenges</li><li>▶ Venia Legendi: Quantitative methods for the social sciences and data science</li></ul> |           |
| 06/17–06/20 | <b>PhD candidate, Dr. phil.</b>  | DUE & CBS |
|             | <ul style="list-style-type: none"><li>▶ Thesis: Correcting survey measurement error with big data from road sensors through capture-recapture</li></ul>  |           |
| 10/14–08/16 | <b>Master Survey Methodology</b>   | DUE       |
|             | <ul style="list-style-type: none"><li>▶ Thesis: Selection Bias in the Dutch Health Survey: An Investigation of Early and Late Online Respondents</li></ul>   |           |
| 10/10–07/14 | <b>Bachelor Sociology</b>  | DUE       |
|             | <ul style="list-style-type: none"><li>▶ Thesis: Nonresponse in Current German Victimization Surveys (German title: Nonresponse in aktuellen deutschen Viktimisierungssurveys)</li></ul>                                |           |

## »»» Research Experience, Collaboration, and Consultancy

|             |   |       |
|-------------|---|-------|
| 05/16–12/20 | <b>DFG-project</b>  | DUE   |
|             | » Project management and data analysis in DFG-project 'Bias in web surveys of the general population using the example of health status'  |       |
| 12/19–03/20 | <b>Research project &amp; Workshop</b>  | LifBi |
|             | » Research Collaboration on 'Anonymization of geo-codes in the BildungsLandschaft Oberfranken (BiLO)' project for privacy-preserving distance computations, at the the 'Leibniz-Institut für Bildungsverläufe e.V. (LifBi)'   |       |
| 07/15–09/15 | <b>Consultancy</b>  | IAQ   |
|             | » Consultancy for data visualization with R, Stata, and $\LaTeX$ for the 'Institut Arbeit und Qualifikation (IAQ)', Centre for Interdisciplinary and International Comparative Research in Social Sciences, Duisburg, Germany |       |

## »»» Visiting Scholar

|      |  |  |
|------|--|--|
| 2024 | <b>University of Oxford</b>  |  |
|      | » Department of Engineering Science/Department of Computer Science<br>Duration: 26.04.2024 – 28.05.2024<br>Collaborator: Prof. Min Chen<br>Visiting scholar within the 'NeEDS – Network of European Data Scientists', a research and innovation staff exchange (RISE) project under the Marie Skłodowska-Curie Program   |  |
| 2020 | <b>KU Leuven</b>   |  |
|      | » Department of Decision Sciences and Information Management, Institute for Research on Information Systems<br>Duration: 08.02.2020 – 08.03.2020<br>Collaborator: Prof. Jochen De Weerd<br>Visiting scholar within the 'NeEDS – Network of European Data Scientists', a research and innovation staff exchange (RISE) project under the Marie Skłodowska-Curie Program |  |
| 2019 | <b>University of Sevilla</b>   |  |
|      | » Statistics and Operations Research, Institute of Mathematics<br>Duration: 12.07.2019 – 04.08.2019 / 06.09.2019 – 13.09.2019<br>Collaborator: Prof. Emilio Carrizosa Priego<br>Visiting scholar within the 'NeEDS – Network of European Data Scientists', a research and innovation staff exchange (RISE) project under the Marie Skłodowska-Curie Program            |  |

## »»» Teaching

|           |  |
|-----------|--|
| 09/2025   | European master in official statistics: data sources and integration, Course leader                                |
| 02/2025   | The use of R in official statistics: model based estimates, European Statistical Training Programme, Course leader |
| 10/2024   | The use of R in official statistics: model based estimates, European Statistical Training Programme, Course leader |
| 06/2024   | The use of R in official statistics: model based estimates, European Statistical Training Programme, Docent        |
| 10/2023   | The use of R in official statistics: model based estimates, European Statistical Training Programme, Docent        |
| 2021–2022 | Data Validation, CBS training  |
| 2020–2021 | Data Collection Methods, Seminar, DUE  |
| 2020      | Data Visualization and Analytics Using R, Seminar, DUE   |

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| 2019–2020 | Data Collection Methods, Seminar, DUE  |
| 2019      | Sampling and Weighting of Survey Data Using R, Seminar, DUE  |
| 2018–2019 | Sampling, Seminar, DUE   |
| 2018      | Graphical Data Analysis Using R, Seminar, DUE  |
| 2017–2018 | Sampling, Seminar, DUE   |
| 2017      | Data Analysis Using Stata, Seminar, DUE  |
| 2016–2017 | Empirical Research Methods for the Social Science, Lecture, DUE<br>Data Collection Methods, Seminar, DUE<br>Data Analysis Using SPSS, Seminar, DUE |
| 2013      | Mentor for First Semester Students, Seminar, DUE   |
| 2012–2016 | Empirical Research Methods for the Social Science, Tutorial, DUE   |
| 2012–2016 | Statistics in Social Science, Tutorial, DUE  |

## »» Grants, Scholarships, and Awards

|      |   |
|------|---|
| 2025 | EMOS 2025 Master's Thesis Competition. Awarded by the European Commission for an outstanding masters thesis research topic and innovative contribution in official statistics. Supervised Student: Solichatus Zahroh (Utrecht University) – Predicting Travel Purpose in a Smartphone-Based Travel Survey   |
| 2020 | Gerhard Fürst Award. Awarded by the German Federal Statistical Office (Destatis) for an outstanding PhD thesis with strong connections to official statistics<br><br>Scholarship. Awarded by the scientific committee of the 2020 EURO PhD School for participation in the 'Data Driven Decision Making and Optimization' at the University of Seville, Institute for Mathematics<br><br>Travel Grant. Awarded by the scientific committee of the 2020 EURO PhD School for participation in the 'Data Driven Decision Making and Optimization' at the University of Seville, Institute for Mathematics  |
| 2019 | Travel Grant. Awarded by the faculty of social science (University of Duisburg- Essen) for participation at the 8th International Conference on Complex Networks and their Applications (ComplexNet 2019)<br><br>Student Grant. Awarded by the scientific committee of the International Total Survey Error Workshop (ITSEW2019)<br><br>Travel Grant. Awarded by the faculty of social science (University of Duisburg- Essen) for participation at the International Total Survey Error Workshop (ITSEW2019)<br><br>Travel Grant. Awarded by the Förderverein (University of Duisburg-Essen) for participation at the New Techniques and Technologies for Statistics (NTTS 2019) |
| 2018 | Travel Grant. Awarded by the faculty of social science (University of Duisburg- Essen) for participation at the International Methodology Symposium (IMS 2018)<br><br>Best Student Paper Award. Awarded by the scientific committee of the BigSurv18 (Big Data Meets Survey Science)<br><br>Travel award. Awarded by the scientific committee of the BigSurv18 (Big Data Meets Survey Science)  |

**Journal Papers**

- in print Klingwort, J. & S. Redlich: Preserving privacy of spatial distances using randomized geometric surface calculations. *Journal of Spatial Information Science*.
- Klingwort, J. & V. Toepoel: Effects of survey design features on response rates: a meta-analytical approach using the example of crime surveys. *Survey Research Methods, Special Issue on Survey Climate and Trust in Scientific Surveys*.
- 2025 Klingwort, J., Y. Gootzen, D. Remmerswaal & B. Schouten: Algorithms versus survey response: Comparing a smart travel and mobility survey with a web diary. *Transportation Research Interdisciplinary Perspectives*, 31: 101436
- 2024 Walraad, M., J. Klingwort & J. Burger: Incorporating machine learning in capture-recapture estimation of survey measurement error. *Survey Research Methods*, 18 (2): 99–112.
- Klingwort, J., J. Burger & J. van den Brakel: Effectiveness of non-pharmaceutical policy interventions in reducing population mobility during the COVID-19 pandemic. *Journal of the Royal Statistical Society Series A: Statistics in Society*: qe050.
- Schnell, R. & J. Klingwort: Health estimate differences between six independent web surveys: Different web surveys, different results? *BMC Medical Research Methodology*, 24 (1): 1–13.
- 2023 Matei, M., P. A. Smith, M. J. E. Smeets & J. Klingwort: Targetted double control of burden in multiple surveys. *Survey Methodology*, 49 (2): 363–384.
- Klingwort, J., S. Brocker & C. Borgs: Spatial and demographic distributions of personal insolvency: an opportunity for official statistics. *Statistical Journal of the IAOS*, 39 (4): 921–931.
- Klingwort, J. & J. Burger: A framework for population inference: Combining machine learning, network analysis, and non-probability road sensor data. *Computers, Environment and Urban Systems*, 103: 101976.
- 2022 Drijver, R., S. van Hoek, J. Klingwort & R. Willems: Detecting cognitive decline using speech recognition via sensors [in Dutch: Cognitieve achteruitgang detecteren met behulp van spraakherkenning via sensoren]. *Statistics and Operations Research (STAtOR)*, 23 (1): 20–23.
- Klingwort, J., S. De Broe & S. A. Brocker: Sensing pedestrian flows for real-time assessment of non-pharmaceutical policy interventions during the COVID-19 pandemic. *International Journal of Population Data Science*, 5 (4): 1688.
- 2021 Klingwort, J., J. Burger, B. Buelens & R. Schnell: Transition from survey to sensor-enhanced official statistics: Road freight transport as an example. *Statistical Journal of the IAOS*, 37 (4): 1289–1299.
- Schnell, R., J. Klingwort & J. Farrow: Locational Privacy-Preserving Distance Computations with Intersecting Sets of Randomly Labeled Grid Points. *International Journal of Health Geographics*, 20 (14).
- Klingwort, J.: Die Verwendung von Strassensensoren und Capture-Recapture-Techniken zur Messfehlerkorrektur in Surveys. *WISTA – Wirtschaft und Statistik*, 1: 49–58.
- 2020 Klingwort, J. & R. Schnell: Critical Limitations of Digital Epidemiology: Why COVID-19 Apps Are Useless. *Survey Research Methods*, 14 (2): 95–101.
- Klingwort, J., B. Buelens, J. Burger & R. Schnell: Using Non-probability Sensor Data to Correct for Measurement Error in a Sample Survey (Dutch title: Gebruik van sensoren om meetfouten in enquêtes te corrigeren). *Statistics and Operations Research (STAtOR)*, 21 (1): 10–14.
- 2019 Klingwort, J., B. Buelens & R. Schnell: Capture-recapture Techniques for Transport Survey Estimate Adjustment Using Road Sensor Data. *Social Science Computer Review*, 39 (4): 527–542.
- 2018 Klingwort, J., B. Buelens & R. Schnell: Early Versus Late Respondents in Web Surveys: Evidence from a National Health Survey. *Statistical Journal of the IAOS*, 34 (3): 461–471.

2017 Klingwort, J.: Nonresponse in Current German Victimization Surveys (German title: Nonresponse in aktuellen deutschen Viktimisierungssurveys). Duisburger Beiträge zur soziologischen Forschung 2017 (01).

### **Conference Proceedings & Conference Papers**

2025 Klingwort, J., Y. Gootzen, M. Kompier & V. Toepoel: How smart are smart travel surveys? Evaluating trip segmentation, travel motive, and travel mode predictions. Mobile Apps and Sensors in Surveys (MASS). London, United Kingdom, 4–5 June 2025.

2024 De Vitiis, C., Beyens, P., Cappadozzi T., De Fausti, F., Inglese, F., Klingwort, J., Michelini, M., Minnen, J., Schouten, B. & Terribili: Enhancing the quality of the prediction of activities in Time Use Smart Surveys using a microservice exploiting GPS data. European Conference on Quality in Official Statistics, Portugal, Lisbon, 4–7 June 2024.

Gootzen, Y., J. Klingwort & B. Schouten: Validating a smart survey travel app: survey response versus algorithms. Mobile Apps and Sensors in Surveys (MASS). Washington DC, USA, 6–7 March 2024.

2023 Ippel, L., L. Burgerjon, L. Houben, R. Kitzen, J. Klingwort, R. Paulissen, M. Smeets & G. Snijkers: Reducing the number of multi-surveyed businesses at Statistics Netherlands. European Establishment Statistics Workshop (EESW23).

Gootzen, Y., J. Klingwort, M. Vollebregt & Schouten, B.: Smart Mobility Surveys: Current App Developments, Methodological Perspectives, and Respondent Interaction. New Techniques and Technologies for Statistics (NTTS), Book of Abstracts: 121–124.

Klingwort, J., J. Burger & J. van den Brakel: The Effect of Non-pharmaceutical Policy Interventions on Population Mobility During the COVID-19 Pandemic. New Techniques and Technologies for Statistics (NTTS), Book of Abstracts: 313–317.

Brocker, S., J. Klingwort & C. Borgs: Exploring Spatial and Demographic Official Statistics on Personal Insolvency. New Techniques and Technologies for Statistics (NTTS), Book of Abstracts: 610–614.

2022 Ippel, L., J. Klingwort, M. Smeets, R. Paulissen, G. Gommans, L. Burgerjon, G. Goris, G. Snijkers & L. Houben: Reduction of Response Burden for Individual Businesses. UNECE Expert Meeting on Statistical Data Collection 2022: Towards to a New Normal?; Rome, Italy.

2019 Klingwort, J., B. Buelens, J. Burger & R. Schnell: Graph-based Inference from Non-Probability Road Sensor Data. Ed. by H. Cherifi, J. F. Mendes, L. M. Rocha, S. Gaito, E. Moro, J. Gonçalves-Sá & F. Santos. Complex Networks 2019. In: Book of Abstracts of the 8th International Conference on Complex Networks and their Applications: 599–601.

Klingwort, J., B. Buelens, J. Burger & R. Schnell: Correcting Survey Measurement Error Using Road Sensor Data. International Total Survey Error Workshop 2019 (ITSEW); Bergamo, Italy.

Klingwort, J., B. Buelens, J. Burger & R. Schnell: Implementing Big Data in Official Statistics: Capture-recapture Techniques to Adjust for Underreporting in Transport Surveys Using Sensor Data. New Techniques and Technologies for Statistics 2019 (NTTS); Brussels, Belgium.

2018 Klingwort, J., B. Buelens & R. Schnell: Capture-recapture Techniques for Transport Survey Estimate Adjustment Using Permanently Installed Highway-sensors. Big Data Meets Survey Science 2018 (BigSurv18); Barcelona, Spain.

Klingwort, J., B. Buelens & R. Schnell: Transport Survey Estimate Adjustment by Permanently Installed Highway-sensors Using Capture-recapture Techniques. In: Proceedings of Statistics Canada Symposium 2018, Combine to Conquer: Innovations in the Use of Multiple Sources of Data.

## Working papers, Discussion papers, Preprints

- 2025
- Gootzen, Y., J. Klingwort & B. Schouten: Data quality aspects for location-tracking in smart travel and mobility surveys. Discussion paper, Statistics Netherlands.
- Zahroh, S., P. Lugtig, Y. Gootzen, J. Klingwort & B. Schouten: Predicting trip purpose in a smartphone-based travel survey. Discussion paper, Statistics Netherlands.
- Klingwort, J., Y. Gootzen & J. Fourie: Development and performance of a transport mode classification algorithm for smart surveys. Technical report for Smart Survey Implementation. Work package 3. Developing Smart Data Microservices. Deliverable 3.2: Smart baseline stage report. Grant Agreement Number: 101119594 (2023-NL-SSI).
- Remmerswaal, D., B. Schouten, J. Bakker, J. van den Heuvel & Jonas Klingwort: A smart travel survey – What is the role of the respondent? Discussion paper, Statistics Netherlands.
- Minnen, J., P. Beyens, K. Peersman, E. Cortebeeck, N. Mingels, J. Klingwort, C. Lam, T. de Jong, Y. Gootzen, M. Puts, J. Olsen, J. van Hoorde, A. Montag, M. Engel, F. De Fausti, C. de Vitiis, M. Terribili & F. Inglese: Smart Survey Implementation. Work package 3. Developing Smart Data Microservices. Deliverable 3.3: Demonstration of the developed smart data microservices. Grant Agreement Number: 101119594 (2023-NL-SSI)
- Minnen, J., P. Beyens, K. Peersman, E. Cortebeeck, N. Mingels, J. Klingwort, C. Lam, T. de Jong, Y. Gootzen, M. Puts, J. Olsen, J. van Hoorde, A. Montag, M. Engel, F. De Fausti, C. de Vitiis, M. Terribili & F. Inglese: Smart Survey Implementation. Work package 3. Developing Smart Data Microservices. Deliverable 3.4: Smart advanced stage report. Grant Agreement Number: 101119594 (2023-NL-SSI)
- 2024
- Minnen, J., P. Beyens, K. Peersman, E. Cortebeeck, J. Klingwort, T. de Jong, T. Oerlemans, J. Olsen, J. van Hoorde, A. Montag, M. Engel, F. De Fausti, C. de Vitiis, M. Terribili & F. Inglese: Smart Survey Implementation. Work package 3. Developing Smart Data Microservices. Deliverable 3.2: Smart baseline stage report. Grant Agreement Number: 101119594 (2023-NL-SSI)
- Bucher, H., F. Keusch, J. Volk, L. Häufglöckner, K. Blanke, C. de Vitiis, F. de Fausti, F. Inglese, M. Terribili, M. Perez, T. P. van Tienoven, P. Lusyne, D. McCool, P. Lugtig, B. Struminskaya, A. Elevelt, J. de Groot, M. Kompier, B. Schouten, J. Klingwort, J. van den Heuvel, J. Solard, S. Quentin, N. Berg & A. Holmøy: Smart Survey Implementation. Work package 2: Research Methodology. Deliverable M14: Smart baseline stage. Grant Agreement Number: 101119594 (2023-NL-SSI).
- Klingwort, J. & V. Toepoel: Effects of survey design features on response rates: a meta-analytical approach using the example of crime surveys. Preprint, arXiv (<https://doi.org/10.48550/arXiv.2411.02552>)
- Schouten, B., D. Remmerswaal, A. Elevelt, J. de Groot, J. Klingwort, T. Schijvenaars, M. Schulte & M. Vollebregt: A smart travel survey: Results of a push-to-smart field experiment in the Netherlands. Discussion paper, Statistics Netherlands.
- Klingwort, J., J. Burger & J. van den Brakel: Analyzing COVID-19 hospitalizations: fostering decision-making in future pandemics. Discussion paper, Statistics Netherlands.
- 2023
- Schnell, R. & J. Klingwort: Health Estimate Differences Between Six Independent Web Surveys: Different Web Surveys, Different Results? Preprint, arXiv (<https://doi.org/10.48550/arXiv.2309.09922>).
- Smeets, M. J. E. & J. Klingwort: Sampling methods to better spread the response burden for small businesses. Discussion paper, Statistics Netherlands.
- 2021
- Klingwort, J. & J. Burger: Inferring a Transport Network from Road Sensor Data Without a Sampling Design. Center for Big Data Statistics Workingpaper No. 02–21, Statistics Netherlands.
- 2020
- Klingwort, J., J. Burger, B. Buelens & R. Schnell: Using Big Data from Road Sensors to Correct Survey Measurement Error Through Multiple Systems Estimation. Center for Big Data Statistics Workingpaper No. 01–20, Statistics Netherlands.

Klingwort, J., R. Schnell & M. Sixt: Geo-masking of coordinates of BiLO respondents for future privacy-preserving distance calculations (German title: Geo-Masking von Koordinaten der BiLO Befragten für zukünftige datenschutzgerechte Distanzberechnungen). LfBi Working Paper No. 87, Bamberg, Deutschland: Leibniz-Institut für Bildungsverläufe.

2019 Schnell, R. & J. Klingwort: Multilevel-Regression und Post-Stratifizierung zur Schätzung gesundheitsrelevanter Merkmale für geographische Subgruppen. Research Methodology Group, Universität Duisburg-Essen. Workingpaper No. 08

Schnell, R. & J. Klingwort: Bias in Websurveys der allgemeinen Bevölkerung am Beispiel des Gesundheitszustands: Die Anwendung gängiger Gewichtungsverfahren zur Gewichtung fünf verschiedener Websurveys. Research Methodology Group, Universität Duisburg-Essen. Workingpaper No. 07

Schnell, R. & J. Klingwort: Bias in Websurveys der allgemeinen Bevölkerung am Beispiel des Gesundheitszustands: Datenaufbereitung der demographischen Variablen für fünf verschiedene Websurveys. Research Methodology Group, Universität Duisburg-Essen. Workingpaper No. 06

Schnell, R. & J. Klingwort: Bias in Websurveys der allgemeinen Bevölkerung am Beispiel des Gesundheitszustands: Datenaufbereitung der demographischen Variablen für fünf verschiedene Websurveys. Research Methodology Group, Universität Duisburg-Essen. Workingpaper No. 05

2018 Klingwort, J.: Das Namensexperiment 2004 – Analyse. Research Methodology Group, Universität Duisburg-Essen.

2016 Schnell, R. & J. Klingwort: Bias in Websurveys der allgemeinen Bevölkerung am Beispiel des Gesundheitszustands: Pretest. Research Methodology Group, Universität Duisburg-Essen. Workingpaper No. 02

Schnell, R. & J. Klingwort: Bias in Websurveys der allgemeinen Bevölkerung am Beispiel des Gesundheitszustands: Fragebogenentwicklung. Research Methodology Group, Universität Duisburg-Essen. Workingpaper No. 01

### **Presentations**

2025 Schnell, R., J. Klingwort & S. Haug: Differences between a CATI and a CAWI survey using the same questionnaire on willingness to share health data and receive vaccinations. European Survey Research Association 2025 (ESRA); Utrecht, The Netherlands, 14.07.2025 – 18.07.2025.

Klingwort, J., J. Bakker & V. Toepoel: Survey design features that matter: A meta-analysis using official statistics surveys of the Netherlands. European Survey Research Association 2025 (ESRA); Utrecht, The Netherlands, 14.07.2025 – 18.07.2025.

Remmerswaal, D., J. Klingwort & B. Schouten: Quantity versus Quality in Travel Diary studies?: Evaluation of a Smartphone App Collecting Geolocations to Construct Travel Diaries. European Survey Research Association 2025 (ESRA); Utrecht, The Netherlands, 14.07.2025 – 18.07.2025.

Klingwort, J.: Improving sampling strategies using machine learning algorithms. Italian Conference on Survey Methodology (ITACOSM). Bologna, Italy, 01.07 – 04.07.2025. **Invited!**

Klingwort, J.: Methodische Probleme von Smart Surveys am Beispiel von Mobilitätsdaten, Oral habilitation presentation, University public colloquium, University of Duisburg-Essen, Germany, 16.06.2025.

Klingwort, J., Y. Gootzen, M. Kompier & V. Toepoel: How smart are smart travel surveys? Evaluating trip segmentation, travel motive, and travel mode predictions. Mobile Apps and Sensors in Surveys (MASS). London, United Kingdom, 4–5 June 2025.

Bakker, J., J. Klingwort & V. Toepoel. The framework of survey behavior: an extension of the framework for web survey participation. International Blaise User Conference, Rotterdam, The Netherlands, 07.04. – 10.04.2025.

Klingwort, J., J. Bakker & V. Toepoel. Survey design features that matter: A meta-analysis using official statistics surveys of the Netherlands. International Blaise User Conference, Rotterdam, The Netherlands, 07.04. – 10.04.2025.

Minnen, J., F. Keusch, L. Häufglöckner, J. van Hoorde, J. Olsen, C. Lam, N. Mingels, E. Cortebeeck, J. Klingwort, Y. Gootzen, C. de vitiis & M. Perez: Smart Survey Implementation: Development and integration of microservices. Smart Survey Conference, Heerlen, The Netherlands, 02.04. – 03.04.2025.

Bakker, J., J. Klingwort & V. Toepoel. The framework of survey behavior: an extension of the framework for web survey participation. General Online Research Conference (GOR), Berlin, Germany, 31.03. – 02.04.2025.

Klingwort, J., J. Bakker & V. Toepoel. Survey design features that matter: A meta-analysis using official statistics surveys of the Netherlands. General Online Research Conference (GOR), Berlin, Germany, 31.03. – 02.04.2025.

Zahroh, S., P. Lugtig, Y. Gootzen, J. Klingwort & B. Schouten: Predicting trip purpose in a smartphone-based travel survey. General Online Research Conference (GOR), Berlin, Germany, 31.03. – 02.04.2025.

2024

Klingwort, J., Gootzen, Y. & Remmerswaal, D.: Validating a smart survey travel app: how do GPS measurements compare to reported behavior? ODISSEI Conference for Social Science in the Netherlands, Utrecht, The Netherlands, 09.12.2024.

Lam, C., M. Puts, J. Klingwort, T. de Jong & V. Toepoel: Analyzing measurement and representational errors in smart survey datasets used for machine learning. International Total Survey Error Workshop (ITSEW2024), George Washington University, Washington, DC, USA, 18–20 September, 2024.

Klingwort, J., K. van Berkel, J. van den Brakel & P. Daas: Using machine learning to improve the sampling and estimation strategy for the Community Innovation Survey. RSS International Conference 2024, 2–5 September 2024, Brighton, UK.

Burger, J., J. Klingwort & J. van den Brakel: Predicting COVID-19 hospitalizations: fostering decision-making in future pandemics. RSS International Conference 2024, 2–5 September 2024, Brighton, UK.

Matei, M., P. A. Smith, M. J. E. Smeets & J. Klingwort: A new look at negative coordination of samples: targetted double control of burden in multiple surveys. Seventh International Conference on Establishment Statistics (ICES VII); Glasgow, Scotland, 19.06.2024.

Klingwort, J., Y. Gootzen, M. Vollebregt, D. Remmerswaal & B. Schouten: From a smart travel-survey proof of concept towards an official statistic. European Conference on Quality in Official Statistics, Portugal, Lisbon, 05.06.2024.

De Vitiis, C., Beyens, P., Cappadozzi T., De Fausti, F., Inglese, F., Klingwort, J., Micheline, M., Minnen, J., Schouten, B. & Terribili: Enhancing the quality of the prediction of activities in Time Use Smart Surveys using a microservice exploiting GPS data. European Conference on Quality in Official Statistics, Portugal, Lisbon, 05.06.2024.

Burger, J., J. Klingwort & M. Walraad: Incorporating machine learning in capture-recapture estimation of survey measurement error. Foundations and Advances of ML in Official Statistics, Wiesbaden, Germany, April 05.04.2024.

Gootzen, Y., J. Klingwort & B. Schouten: Validating a smart survey travel app: survey response versus algorithms. Mobile Apps and Sensors in Surveys (MASS); Washington DC, USA, 07.03.2024.

2023

Ippel, L., L. Burgerjon, L. Houben, R. Kitzen, J. Klingwort, R. Paulissen, M. Smeets & G. Snijkers: Reducing the number of multi-surveyed businesses at Statistics Netherlands. European Establishment Statistics Workshop 2023 (EESW23); Lisbon, Portugal, 21.09.2023.

Schnell, R. & J. Klingwort: Health Estimate Differences Between Six Independent Web Surveys: Different Web Surveys, Different Results? WAPOR 76th Annual Conference: Public Opinion Research in a Technology-Driven World, Salzburg, Austria, 20.09.2023.

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Klingwort, J. & R. Schnell: Critical Limitations of Digital Epidemiology: Why COVID-19 Apps Are Useless. Network of European Data Scientists (NeEDS), Workshop on Data and Decisions in the COVID19 times, 01.07.2020, (online).

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Schnell, R. & J. Klingwort: Privacy Preserving Locational Distance Computations – Application in R. Workshop at the Leibniz-Institut für Bildungsverläufe e.V (LifBi); Bamberg, Germany, 13.01.2020.

2019 Klingwort, J.: Big Data to Improve Policy and Decision Making: Experiences and Applications of Statistics Netherlands. Guest lecture at the Institute of Statistics and Cartography of Andalusia; Seville, Spain, 10.09.2019.

Klingwort, J., B. Buelens, J. Burger & R. Schnell: Correcting Survey Measurement Error Using Road Sensor Data. International Total Survey Error Workshop (ITSEW); Bergamo, Italy, 12.06.2019.

Klingwort, J., B. Buelens, J. Burger & R. Schnell: Graph-based Inference from Non-probability Road Sensor Data. Statistics Netherlands (CBS); The Hague, The Netherlands, 16.05.2019.

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2018 Klingwort, J., B. Buelens & R. Schnell: Capture-recapture Techniques for Transport Survey Estimate Adjustment Using Road Sensor Data. Big Data Meets Survey Science 2018 (BigSurv18); Barcelona, Spain, 26.10.2018.

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2017 Schnell, R. & J. Klingwort: Matching-Techniques (German title: Matching-Verfahren). Guest lecture at the Bundesinstitut für Berufsbildung (BIBB); Bonn, Germany, 30.11.2017.

Klingwort, J., B. Buelens & R. Schnell: Capture-recapture Techniques to Validate Survey Through Sensor Data. NPSO Innovation Day of Statistics Netherlands & Statistics Belgium; The Hague, The Netherlands, 22.11.2017.

Schnell, R. & J. Klingwort: Putting People on the Map Without Revealing Their Location: Privacy Preserving Locational Distance Computations. Guest lecture at the Leibniz-Institut für Bildungsverläufe e.V (LifBi); Bamberg, Germany, 22.11.2017.

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### **Habilitation**

2025 Klingwort, J.: Quantifying dimensions of society: Methods, approaches and challenges. Habilitation Thesis, University of Duisburg-Essen, Faculty of Social Sciences.

### **Dissertation**

2020 Klingwort, J.: Correcting Survey Measurement Error with Big Data from Road Sensors through Capture-recapture. Doctoral Thesis, University of Duisburg-Essen, Faculty of Social Sciences.

### **Other Publications**

2025 Boonstra, H.J., M. Smeets & J. Klingwort: Enquêtedrukspreiding voor hotspots. Internal report, Statistics Netherlands.

2023 J. Klingwort & Smeets, M. J. E.: Balanced sampling. M-zine: Nieuwsbrief over Methodologie 15 (2): 11–13.

J. Klingwort & Smeets, M. J. E.: Hotspot analyses using the Research & Development and Community Investment surveys. Internal report, Statistics Netherlands.

Klingwort, J. & S. Krieg: Steekproefontwerp Statistiek Research & Development. Internal report, Statistics Netherlands.

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2021 Van Hoek, S., Willems, R. & Klingwort, J.: Detecting cognitive decline using speech recognition: Reporting experiences and results from the Sensor Data Challenge. M-zine: Nieuwsbrief over Methodologie 13 (3): 28–30.

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Klingwort, J. & J. Burger: Inferring network traffic from sensors without a sampling design. Beta-Product for the Center for Big Data Statistics (Statistics Netherlands).

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Krieg, S., T. de Jong, J. Klingwort, M. Puts & M. Geurden-Slis: Thoughts on Corona Statistics. M-zine: Nieuwsbrief over Methodologie 12 (2): 13–18.

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- 2018 Klingwort, J.: Combining Survey Data With Big Data (Dutch title:Wegvervoer onderzoeken door koppelen bronnen). In: E-data & Research 12 (2): 2.
- Meijers, R., S. de Broe, O. ten Bosch, P. Daas, J. Klingwort & J. Bakker: BigSurv-conference 2018 (Dutch title: BigSurv-conferentie 2018). M-zine: Nieuwsbrief over Methodologie (10) 4: 30–31.
- 2017 Klingwort, J.: Microsimulation. M-zine: Nieuwsbrief over Methodologie 9 (3): 40–41.

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### **Forthcoming**

Klingwort, J., Burger, J. & van den Brakel, J.: Timely predictions of the present: enhancing the relevance, accuracy, and timeliness of survey estimates. 65th ISI World Statistics Congress, The Hague, The Netherlands, 05.10. – 09.10.2025.

Remmerswaal, D., Klingwort, J., Gootzen, Y., Vollebregt, M. & B. Schouten: Quantity versus quality in travel diary studies: Evaluation of a smartphone app collecting geolocations to construct a travel diary. 65th ISI World Statistics Congress, The Hague, The Netherlands, 05.10. – 09.10.2025.

Klingwort, J. & R. Schnell: Web surveys in public health research: a systematic comparison of different sampling strategies Health. 65th ISI World Statistics Congress, The Hague, The Netherlands, 05.10. – 09.10.2025.

de Vitiis, C., F. de Fausti, F. Inglese, T. de Jong, J. Klingwort & B. Schouten: How to embed and improve AI-ML in smart surveys for official statistics. 65th ISI World Statistics Congress, The Hague, The Netherlands, 05.10. – 09.10.2025.

Leach, N., J. Klingwort, & J. Burger: Performance of machine learning classifiers for remote sensing: a meta-analysis. Quality & Quantity.

Klingwort, J., K. van Berkel & J. van den Brakel: Improving the sampling strategy for the Community Innovation Survey using machine learning algorithms. Discussion paper, Statistics Netherlands.

Fourie, J., J. Klingwort & Y. Gootzen: Rule-based transport mode classification in a smart travel and mobility survey. Discussion paper, Statistics Netherlands.

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### **Under Review**

Smeets, M. J. E. & J. Klingwort: Spreading response burden in business surveys: evaluating sampling methods targeting highly burdened businesses. Survey Methodology.

Rohde, E., J. Klingwort & C. Borgs: A meta-analysis on the performance of machine-learning based language models for sentiment analysis. Communication Methods and Measures.

Klingwort, J., J. Bakker & V. Toepoel: Explaining heterogeneity in response rates using paradata: a meta-analysis on official statistics surveys. Journal of Survey Statistics and Methodology.

Zahroh, S., Y. Gootzen, J. Klingwort, P. Lugtig, & B. Schouten: Predicting trip purpose in a smartphone-based travel survey. Statistical Journal of the IAOS.

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### **In Progress**

- Q3 2025 Klingwort, J. & R. Schnell: Comparing health research non-probability and probability web-surveys with official statistics. Journal of Medical Internet Research.
- Q3 2025 Klingwort, J., K. van Berkel & J. van den Brakel: Improving the sampling strategy for the Community Innovation Survey using machine learning algorithms. Statistical Journal of the IAOS.
- Q3 2025 Boer, Q., Y. Gootzen, J. Klingwort, D. Remmerswaal, P. Lugtig: Transport mode prediction. Discussion paper, Statistics Netherlands.
- Q4 2025 Remmerswaal, D., J. Klingwort & B. Schouten: Meta analysis smart survey participation.

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| Q4 2025 | Gootzen, Y., J. Klingwort, Q. Boer & J. Fourie: Transport mode prediction.  |
| Q1 2026 | Schnell, R., J. Klingwort & S. Haug: Privacy and Willingness to Share of Health Data mode comparison. Journal of Medical Internet Research. |
| Q1 2026 | Klingwort, J., J. Burger & J. van den Brakel: Nowcasting RFTS.  |

### »» Referee for Journals

- International Journal of Health Geographics
- Social Science Computer Review
- Survey Research Methods
- The R Journal
- AStA - Advances in Statistical Analysis
- Scientific Reports
- Big Data & Society
- Health Science Reports
- Statistical Journal of the IAOS
- Journal of Survey Statistics and Methodology
- Journal of Official Statistics

### »» Professional memberships

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| 2021-... | Dutch Platform for Survey Research (NPSO) [ <a href="https://www.npsso.net/">https://www.npsso.net/</a> ] – Core member |
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- Organized the annual NPSO congress on AI and survey research (2025)
- Organized the annual NPSO congress on non-response and hard-to-reach populations (2024)
- Organized the bi-annual innovation day (2023)
- Organized the NPSO congress on sensor data and surveys (2022)

### »» Conference and Event Organization

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|---------|---|
| 07/2025 | Organized and led the session 'Measurement errors in smart surveys: Accomplishments, challenges, and looking forward' at the 11 <sup>th</sup> Conference of the European Survey Research Association, 14.07.2025 – 18.07.2025 hosted by Utrecht University in Utrecht, The Netherlands. |
| 01/2025 | Organized and led the research proposal 'A conceptual framework to effectively and efficiently sample data annotators from a specified target population to train and update AI-ML models' for the Mathematics with Industry workshop at the University of Utrecht.                     |
| 02/2023 | Organized and led the research proposal 'Optimal Indoor-location of Indoor Climate Systems' for the Mathematics for Industry program of the University of Utrecht.  |